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GUY'S HOSPITAL GAZETTE

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PASSIM

As long ago as 1857 John Ruskin addressed himself to the members of the Architectural Association of London*. On that occasion he declared, "If an architect does his working-drawing well, we praise him for his manipulation—if he keeps closely within his contract, we praise him for his honest arithmetic—if he looks well to the laying of his beams, so that nobody shall drop through the floor, we praise him for his observation. But he must, somehow, tell us a fairy tale out of his head beside all this, else we cannot praise him for his imagination, nor speak of him . . . as being in any wise out of the common way, a rather remarkable architect." What severe criteria are thus set before the aspiring professor of building! Today, more than ever, the successful architect must have at his command the training of the scientist, the skill of the craftsman, the astuteness of the lawyer, the creative faculty and sensibility of the artist and, above all, like the medical practitioner, —as Ruskin again was at pains to stress—a love of mankind and sympathy with one's fellow creatures.

In no particular branch of architecture are these qualities at a greater premium than in the designing of a modern hospital. There is so little previous work or experience to serve as a guide and, meantime, the whole circumstances are in a state of change. The product of the architect is permanent, or very nearly so; the systems and, consequently, the material demands of the physician and surgeon change virtually overnight.

At the present time it is fair game to lampoon the " planners " and taunt them for their faults. Yet who, in the rightness of his mind, would seriously consider the raising of a new Guy's without adequate forethought and exhaustive investigation? The fact is that a wonderful opportunity has arisen—to erect a new hospital building and to establish, probably for centuries, a centre from which the tradition and practice of Guy's shall stem with renewed vigour.

Circumspection, admittedly, is called for but, at the same time, a healthy curiosity into current thought and opinions upon this theme. That is why we have considerable pleasure—and express particular gratitude and acknowledgement to the authors and others concerned, in being able to publish in this issue of the *Gazette* two papers on " Background to Modern Hospital Architecture " read before the Architectural Association in London as recently as November, 1950.

* *Ruskin, John.* " *Influence of Imagination in Architecture.*" *An address delivered to the Members of the Architectural Association, Lyons Inn Hall,* 1857.

* * *

Congratulations are offered to those of Guy's who received awards in the New Year Honours. A Knighthood was conferred on Mr. W. Kelsey Fry, the C.B.E. on Dr. Geoffrey Marshall and the Royal Red Cross (First Class) upon Miss Barbara Nockolds, A.R.R.C., Acting Matron, Q.A.R.N.N.C., Matron of the Hospital Ship S.S. Maine in Korean waters.

Background to Modern Hospital Architecture.—I.

By Dr. RENÉ SAND,
Honorary Professor of Social Medicine, University of Brussels,
President of the International Hospital Federation.

IT is indeed a privilege, but also a bold venture to speak before such a distinguished and competent audience, and I hesitated to accept the honour it entailed until I was given to understand that all you expected from me was a short and informal talk about some of the medical requirements the modern hospital architect needs to take into consideration.

I will give you a few gleanings from my personal experience in various countries, and if I do not quote the achievements of your own hospitals in the past or present, it does not mean that I fail to give them the commendation they deserve. But they are your work, your legitimate pride, and you certainly do not expect me to tell you what you know infinitely better than I do.

My task, however, remains difficult, because it would be tedious to enter into technical details, and on the other side generalisations are always dangerous. For instance, the favour of the block system is by no means universal: its undeniable advantages are offset by the comparative seclusion and regimentation of the patient; compensation must be found in greater personal attentions of all kinds. Even so, the pavilion system seems preferable as regards chronic patients and, generally speaking, institutions built in small cities or in the country: sunlight, air and contact with nature are better secured in a pavilion than in a block building.

Requirements are obviously different for a general hospital, a hospital for chronic patients, a children's hospital, a teaching hospital, a small local hospital. Needs vary from place to place, as well as means to satisfy them, but however great the temporary restrictions imposed by economic situation, lack of materials, scarcity of labour, we must build so as to be able later to realise the best standards.

In spite of their variety, one principle applies to every hospital: its foremost aim to which structure, equipment, organisation and staff must conform and to which everything else must be subordinated is the cure and well-being of the patient, which includes a sincere regard for his person. This is not only an ethical and social duty: mental and physical elements are so closely associated that medicine has become psychosomatic. We realise again what doctors knew so well in past centuries, that emotions play a considerable part in the causation and aggravation, or in the alleviation and cure of many diseases. Thus, we have not only to give our patients the best material care, but also to respect and to cultivate their personality and their dignity. Everything that may shock or humiliate or restrain them unduly must be avoided. To quote one example, in the Southern Hospital at Stockholm, the receiving department is divided into two sections, one for medical, the other for surgical cases, in order to avoid a patient brought, let us say, in a heart attack being upset by having to witness the dramatic arrival of the victim of an accident.

Of course the planning of a hospital has to be carefully prepared by the joint effort of architects, engineers, administrators, doctors, nurses, dieticians, social workers, experts of all kinds. Once the hospital is built, its defects can only be remedied incompletely and at great cost. Thus time and counsel are needed. The best method is to proceed experimentally, as did architect Hjalmar Cederström in the planning of the Southern Hospital at Stockholm. Among the many committees which he set to work, the study group entrusted with the plan of the room units had come to a definite conclusion. Then according to the adopted plan, a room was built as a full scale model in an old house, with two of the walls in plywood and moveable. When everything was fitted in, a nurse was asked to live in the room for a day or two, and to propose the alterations her experience suggested; she was followed by another nurse, and so on, until the dimensions of the room, the place of the furniture, the lighting, and so on, were entirely satisfactory. The same is being done at Zurich for the planning of the University Hospital. A considerable economy is thus effected: errors are avoided before they are committed.

This brings me to the great dispute on rooms versus wards. You know that the " bed-area " of any hospital is now conceived as a series of nursing units, each unit consisting of an average of 30 beds, under the care of one head-nurse and 8 to 10 nurses and probationers. Formerly, such a unit would have consisted of 2 big wards and a few single rooms for special cases. Now the idea has spread that if we order a single bed-room when we go to a hotel, we desire privacy even more when we feel ill and are subject to all kinds of unpleasant symptoms and needs. This has led the newer Scandinavian, Swiss and American hospitals to divide their nursing units more or less equally between single rooms, rooms with 2 beds and rooms with 4 beds, doing away completely with wards. The beds are generally parallel to the outside wall and window (Rigs plan) so as to avoid glare or the dreariness of facing nothing but an interior wall. Thus according to the nature and stage of the disease as well as to the wish of the patient, he or she can be alone, or have one or three companions. Why not rooms with 3 or 6 beds? Because in a room with 2 or 4 beds, each patient has a corner to himself, and enjoys the possibility of turning his head towards the wall if he feels unsociable.

This system has met with various objections. First, the cost. But if you build only small rooms, you do not need the height required for big wards. It is generally agreed that 125 square feet is a minimum for a single bed room, and 80 square feet for each additional bed, one yard being the minimum distance between two beds. With a height of 9.5 to 10 feet, it does not cost more to build small rooms than to build wards. The second objection is the extra distance to be covered by the nurses. If the unit has been well planned, if each room has a wash-basin, if toilets and sluice rooms are judiciously placed, here again big wards and small rooms are equivalent. A last objection is the danger of leaving a patient alone in his room, for fear that a sudden complication may arise: this danger does not exist in rooms with 2 or 4 beds; it can be obviated in single bed-rooms by the very simple device of having a view-window inserted in the wall separating the room from the corridor: thus in passing to and fro the nurse can look at the patient without disturbing him or taking the trouble to enter the room. When the patient wants rest, or is being examined or treated, a curtain obscures the view-window. Besides the privacy they afford, a considerable advantage of the small rooms is the flexibility they give as regards the segregation of age, sex and condition. In the traditional system, on the contrary, some wards are crowded while there are empty beds in others.

Each nursing unit must evidently provide not only bed rooms, but the nurse's station, an examination and treatment room, a utility room, a kitchen and pantry, a sluice room for urinals and bedpans, as well as lavatories and bath-rooms, a linen closet, a supply closet, a stretcher closet, a closet for brooms and pails and other cleaning utensils, finally doctors', nurses' and attendants' lockers and toilets. Besides these facilities it is advisable to provide a visitors' waiting room—also a parlour where the patient can have a private talk with the clergyman, the doctor, the social worker, or with his relatives, his lawyer, his employer—and a solarium or day-room to which patients walk or are brought in their beds or in a wheel-chair; they have their midday meal there as well as conversation, recreation, occupational therapy, even gymnastics. The monotony of the day is thus considerably relieved, and the architect is no more under the obligation to draw his plans so that every bed-room should look south: when rooms are inhabited mainly during the night, their orientation becomes less important.

The Scandinavians go further than that. No examination, no treatment, not even the natural functions of the body take place in the bed-room, nor are stretchers used to transport the patient. He is wheeled, in his own bed, to the examination and treatment room, to the X-ray room, to the anæsthetic room, to the lavatory and enema room, to the parlour, and of course to the solarium. This can be done by attendants, so as not to add to the nurses' work.

May I also call your attention to the need of providing for the comfort of the visitors, and at the same time for the cleanliness of the hospital. The ideal solution would be to have a special system of corridors for the visitors, so that, in the words of an American author, the traffic of patients and staff, which is a 24-hours parade, should not be confused at certain hours by visitor traffic. At any rate a cloak-room for visitors is needed to avoid their coming near the patients in dripping clothes and embarrassed with hat, coat and umbrella; this device also facilitates the supervision of the food brought from the outside to the patients. Next to the cloak-room we should have a catering shop, a flower shop, a book and stationery shop, eventually acting as a branch of the post-office, also a toy shop. For the staff we ought to provide a hairdresser service for men and for women, as well as one or several canteens. The canteen of the Bürgerspital at Basle is free for every member of the staff, the idea being that as the utmost devotion and effort is required at every hour of day and night, the relief of a cup of tea or coffee and of a sandwich or a cake is to be provided without cost as a matter of course.

I have already hinted that a major consideration in planning is the economy of distances for the nurses and the staff in general: it is advisable to measure these distances on the plan itself, for the various kinds of care the patient is to receive daily.

Another necessary precaution is to let the plans be seen by an expert in precautions against fire and against bombing. I know a great hospital on the Continent to which the chief of the fire brigade was called when the building was already complete, in order merely to state where the emergency hoses had to be put. He used strong language to impress that if he had been warned in time the place would not have been built as a firetrap.

May I also put in a plea for beauty, not elaborate ornamentation, but harmonious lines and proportions, well-chosen materials, agreeable colour schemes, different for each floor or each section. It will make the hospital more pleasant for the staff and less forbidding for the patient. When the forces of life are at a low ebb, everything must be brought to help, and certainly congenial surroundings are a relief for the eyes as well as for the mind.

Ventilation is an evident need. However, I would not go as far as to depend entirely on conditioned air and do away with natural ventilation. There is something in direct contact with the atmosphere which science has not yet elucidated; there may be substances in the air which play the same part as the vitamins in the foodstuffs.

The avoidance and abatement of noise are indispensible. A useful precaution in big hospitals is to have a receiving unit, complete with bed-rooms, X-ray, laboratory and operation theatre, for patients brought in between, let us say, 6.0 p.m. and 8.0 a.m., so as to prevent newcomers from disturbing the patients during the night. This consideration also enters into the planning of the out-patients department. Some want it separate from the " bed area." Others object that it is costly to duplicate, in the hospital proper and in the out-patient department, the equipment needed for examination and treatment; they state that when the out-patient department is far from the bed units it is liable to become sacrificed and left to routine. However, to attach an out-patient department to the medical, surgical, obstetrical and specialised units means bringing supplementary traffic, noise, soiling, eventually infection inside the hospital itself. There is no consensus of opinion on the matter, but the importance of the out-patient department ought to be fully recognised. It should be comfortable and allow for the convenience of relatives accompanying the patient. Some of the waiting rooms I have seen could compete with a first-class hotel lobby. Cubicles for taking off clothes and putting them on again should be provided. Arrangements must allow each patient to be seen privately by the doctor.

That a hospital needs to care not only for the health of the patient, not only for his or her spiritual needs, but also for education, recreation, occupational therapy and rehabilitation, is now universally admitted. To the classical requirement that a hospital needs a chapel some would add a library, a theatre, a gymnasium and work shops. Others place in or next to the hospital the Health Centre, the District Nursing Service, the Public Health Service, the Public Assistance Service.

An immense scope lies before the hospital architect. I have no doubt that you will plough as many new ways in the future as you have done in the past for the benefit of mankind.

Background to Modern Hospital Architecture—II.

By RICHARD LLEWELYN DAVIES

Director and Architect, Nuffield Foundation Investigation into the Functions and Design of Hospitals.

ONE reason why I am very glad to have been asked to speak here tonight is that it gives me an opportunity to thank you at the A.A. for some help you gave us in the Investigation into the Functions and Design of Hospitals about a year ago. You then, through the kindness of your Principal, put at our disposal the services of about 80 A.A. students for a day. These students were sent by us into the Westminster Hospital, where we were making a traffic census. Each bore a cleft stick in which was inserted a card bearing the device: "Please answer one question." With this flimsy armament, they had the task of stopping every passer-by, doctor, patient, nurse, even perhaps the Matron herself, and asking them where they were going to. This truly terrifying task they performed with the tact, charm and devotion to the cause of research for which the A.A. School is justly famous. I must add, however, that their returns in which the numbers of passers-by were totalled, were rarely, if ever, correctly added up.

In his closing sentences, Professor Sand has really thrown out a challenge to us as architects. In his talk tonight he has painted for us a picture of what the hospital should be. This picture is one that has been emerging in bits and pieces, from the thought and work of progressive doctors, nurses, and others concerned with the hospital in many countries and over a period of years. Tonight Professor Sand has assembled the various pieces of the jigsaw, with a brilliant combination of logic and imagination, and put the picture before us. "Now," he says in effect, "Get to work and bring a new hospital architecture into being." He is kind enough to say that he is sure we will succeed. I will not go so far; all I will say is that we mean to have a very good try.

The difficulties are very formidable. The need for rigid economy, both in capital and running costs is the biggest and indeed the fundamental, problem. In this country, since the Health Act, the enormous size of the sums which have to be spent annually on the health service has been forced on our attention and we have to accept that a limit must be set to such expense. Again the acceptance of social responsibility for the care of all sick persons has meant that the limited total funds available must be fairly distributed. For some years to come this will mean that much money must be spent on developing and improving the many existing hospitals which are below the proper standard of equipment, and there will be few large new projects on a scale likely to give a real opportunity for architectural innovation and development. Those new schemes which do go forward will inevitably and rightly be examined very critically from the point of view of cost. It will not be sufficient for some new improvement to be good and desirable in itself. It will have to be justified as being a *better* way of spending a certain sum than any possible alternative, within the field of the hospital service.

For example, suppose we accept that it would be good and desirable for every patient's room to have an adjacent toilet. So far so good—but can we demonstrate that money spent on this provision is better laid out than the same money spent on, say, providing plenum ventilation to theatres and treatment rooms? This sort of problem—a problem of balance and choice between conflicting alternatives—crops up as soon as an architect settles down to plan a hospital. To solve these problems we need comparative data, but compared with other types of building, such as schools or housing, there is very little to go on in the way of standards or data in hospital planning. There is a real gap between the broad conception of the hospital, such as Professor Sand has given us tonight, and the working out from this conception of a detailed programme for the architect. I think every hospital architect has come up against this gap, and felt the need for some sort of research to bridge it.

It was partly to meet this need that the Nuffield Provincial Hospitals Trust and Bristol University decided to sponsor the investigation of which I am now the head. Our work was begun, and our team built up under the leadership of my predecessor, John Madge—who, like myself, was trained in architecture here at the A.A. The work I hope to tell you something of tonight, which was in progress during the first two years of the investigation, was largely carried out under his leadership and owes much to his inspiration.

Professor Sand, in his talk, illustrated his theme, the need for a new humanity in design, mainly with reference to ward planning. I propose to follow him, for the good reason that the in-patient service, of which the wards are part, is the subject on which we have done most work. Ward planning, like most other aspects of hospital design, is a large subject, rather difficult to come to grips with. Generally we have found the best way to work has been to select certain aspects of such a problem, aspects to which it is possible to apply scientific study; and thus to focus two or three rays of light, from different angles, into the general darkness. We have found it possible to study several aspects of ward planning in this way, and I propose to mention two or three by way of examples.

Perhaps the most obvious is the examination of what is known in medical circles as "early ambulation." That is: "How soon does a patient get up?" or: "in a given ward how many patients are (*a*) totally bedfast, (*b*) able to get up and wash or go to the toilet, (*c*) up and about for meals and so on?" Too many wards in the past have been designed on the assumption that all patients were bedfast; and the full implications of the present trend towards getting patients up earlier are only just being realised. An extensive survey of the proportion of patients to be found in the three categories I have just mentioned was carried out by the medical member of our team, Dr. Goodall, and should soon be published. This will help to establish standards of provision for day spaces, toilet and washing facilities, and so on. Incidentally, the rather low number of bedfast cases which it now seems reasonable to expect, diminishes the case for some of the more revolutionary proposals in Swedish ward planning. For instance, it seems hardly worthwhile to have elaborate provision for wheeling every patient in his bed to a special room for the purpose of giving him a bedpan, if in fact most of them are going to be encouraged to get up and move about a bit for themselves.

Another example is the question of single rooms. A survey on the need, on a strictly medical basis, for single rooms, was made by Dr. Goodall and will be appearing shortly in the medical press. The method here was to get groups of specialists to set down the medical conditions for which isolation could be regarded as desirable in the interests of the patient's cure; or conditions so distressing as to upset others in the ward. By the co-operation of the hospitals, records were kept in a large number of wards showing the occurrence of cases falling within the conditions. Analysis of the records by statistical methods gives us the percentage of single rooms needed to satisfy the demand. Of course, to this must be added any single rooms required for paying patients and so on.

Another question, of great importance to economic planning, is: "How much space is needed around a hospital bed?" This turns partly on questions of infection, and partly on the space needed to nurse the patient. On the latter point there has been a good deal of dispute, and we thought it worthwhile to try to get some definite data. We therefore took films of nursing—including samples of all the most space-consuming procedures, the floor and back wall having been marked out in foot squares to show the position of the nurse at any moment. The hospital authorities were very co-operative, even to the extent of selecting for the leading rôle in our picture, a nurse of the largest possible girth, so that we could legislate for extreme cases.

As a last example, there is an important piece of research we are doing jointly with the Architectural Physics Division of the Building Research Station. Thanks to the co-operation of the D.S.I.R. we have been able to arrange for a member of our team to be seconded for work at the Building Research Station on hospital problems. One of these is the question of daylighting in wards. How deep can a ward be, with a given ceiling height, and still receive adequate daylight at the points furthest from the window? As the deeper the block can be made the greater the economy in planning, construction, and running costs, this is clearly an important question. At the Building Research Station a team of physicists and architects has been studying this problem with a large scale model of a ward. This model stands in an artificial sky, and its ceiling can be raised or lowered, and the shape and position of the windows varied. The daylight reaching various points, such as the patients' beds or the nurse's desk, is recorded by photo-electric cells. An advantage of working with a model is that walls and floors can be coloured in accordance with various colour schemes, and their effect on the daylighting measured. The model has also helped us to study the problem of glare: that is how to design a window which will throw light deep into the ward, while cutting off the light somewhat for the patient nearest the window, who often suffers from intolerable sky glare at present.

This piece of work, which is an interesting example of the way a science like physics can help us to a fuller understanding of architectural design, may eventually have repercussions in fields other than hospital building, and we are very grateful to the Building Research Station for the opportunity of working with them in such a fascinating subject.

With these examples of research bearing on ward planning, I have tried to give you an idea of the way in which scientific study can illuminate a problem from different angles. Similar work is in progress on other aspects of the hospital—the theatres, the out-patients, and so on. When all this has been done, however, and all the data has been assembled, though we may see the problem more clearly, *we will not have solved it*. We will not yet have produced the hospital architecture envisaged by Professor Sand tonight. That remains the task of imaginative design, the task of the architect. I see a great many hospitals, new and old, in the course of my work, and I sometimes feel that it is in this very field of imaginative, sympathetic design that we have most failed. Many of our modern hospitals are efficient medical machines; some, not so many, are also reasonably economical to run, but how few have that atmosphere of humanity, of respect for the individual human being for his own sake, which Professor Sand has so rightly stressed. I do not think this is solely a matter of big or little wards, I think it is something rather deeper, something in our whole approach as architects to hospital design.

Perhaps I can explain what I mean by reference to the present standard of design in school buildings. Most of the schools now going up have, despite great variety, a cerain common quality, in harmony with the children who use them—a sort of *schoolishness*, which is exactly right. That is what we want in hospital architecture, a quality that might be called *hospitality*, a quality that will be appropriate to hospitals and will single them out from other buildings. It is no use trying to borrow from other buildings. Hospital design has too often been derived in this way.

Consider the large open English ward, originally advocated by Florence Nightingale and still being built almost without modification in 1939. What is the inspiration behind this design, with its rows of parallel beds and alternating lockers? I think it is a military inspiration. Florence Nightingale herself said: "The open ward of 30 beds is the best for ensuring proper discipline and supervision." In fact it is really a barracks room, thinly disguised and, in its own day, its stress on discipline and order was necessary enough.

Again look at the modern American hospital with its batteries of lifts, long artificially-lit corridors, and endless succession of box-like tooms. Here we have simply an hotel. The patient is just a hotel guest, shut away in his room, with the doctors and nurses available as a sort of addition to the usual room service. Perhaps this last approach to hospital planning derives from an attempt to deny the reality of sickness. This attempt will not help hospital architecture.

We should ask ourselves: "What does the patient really need from his environment in the hospital?" Undoubtedly he needs reassurance by a human, domestic scale in his surroundings. The institutional, impersonal atmosphere created by the excessive use of hard synthetic materials, such as tiles, plastics, and chromium plate, should go. The patient should be able to see the ground outside, and trees and flowers growing outside, if possible. All this is nowadays fairly common ground.

There is, however, another kind of reassurance that the patient needs equally—the sense that he has committed himself to a vigilant, efficient and careful team, a team of skilled people who take from him responsibility for his physical well-being while he is in their hands. Architecture can contribute to this sense, and will not be true hospital architecture until it does so. A French friend of mine recently fell ill in England and with some misgivings allowed himself to be carried off to an English hospital. After a poor night in a ward, he awoke as the night staff went off duty, and the day sister took over. He told me he was immensely impressed, reassured, and comforted by the efficient and systematic routine, each night nurse reporting in turn on the state of the patients, and the sister checking records and going round the ward. He felt he was part of something, something with purpose, and he felt better.

I think there is a moral in that story for hospital architects.

Guy's Diary

ACADEMIC

January

		Exhibition. Surgical Department. " The Tongue."
15th	1.00	Mr. Batchelor. Clinical Lecture. " Congenital Dislocation of the Hip."
16th	1.00	Dr. Cameron. Clinical Lecture. " History of Medicine " *contd.*
18th	1.00	Mr. Wass. Clinical Lecture. " Soft Tissue Infections of the Face and Neck."
	4.30	X-Ray Meeting. Gordon Museum.
19th	1.00	Dr. Hardwick. Clinical Lecture.
	2.15	Medical Department. Clinico-Pathological Meeting. Pathology Lecture Theatre.
22nd	1.00	Dr. Wayte. Clinical Lecture.
23rd	12.00	Mr. K. Hooper. Dental Clinical Lecture " Some Popular Dental Fallacies." Dental Theatre.
	1.00	Professor Spurrell. Clinical Lecture. " The Use and Abuse of Systems."
25th	1.00	Mr. Glover. Clinical Lecture.
	4.30	X-Ray Meeting. Gordon Museum.
26th	1.00	Dr. Campbell. Clinical Lecture. " Examinations."
	2.15	Medical Department. Combined Round. Pre-Clinical Classroom.
27th	10.00	Surgical Department. Clinico-Pathological Meeting. Anatomy Theatre.
29th	1.00	Dr. Munro. Clinical Lecture.

SPORT

20th		ENGLAND *v.* WALES. (WALES).
	Rugby	1st XV. *v.* Metropolitan Police. (HOP.)
	,,	"A" XV. *v.* Metropolitan Police "A" (HOP.)
27th	Rugby	1st XV. *v.* Devonport Services. (Devonport.)
	,,	"A" XV. *v.* Norwich. (HOP.)
29th	Rugby	1st XV. *v.* Paignton. (Paignton.)

BOXING

The annual Open Boxing Tournament under A.B.A. rules organised by Guy's Hospital Amateur Boxing Club in aid of the funds of the Pavy Gymnasium will be held at Seymour Hall, Marylebone, W.1, on Tuesday, 13th February, at 7.15 p.m. The programme will consist of a special team match between Guy's and the Metropolitan Police supported by special contests between prominent boxers of well-known amateur boxing clubs.

Prices of admission are: 12*s.* 6*d.*, 10*s.*, 7*s.* 6*d.*, 5*s.*, 2*s.* 6*d.*, all numbered and reserved. Tickets are obtainable from the Counting House, Guy's Hospital, S.E.1 (HOP 1086); G. A. R. Winston (HOP 3500, Ex. 381); A. S. Atkinson (Hon. Sec.); Seymour Hall (PAD 8018), or any member of Guy's Hospital.

EDWARD HERBERT

Mr. Edward Herbert, Dispensing Assistant of the Pharmaceutical Department, retired on 22nd December, 1950, after 48 years valuable service in this Hospital.

We all wish him the very best of luck in his retirement and sincerely hope that he will thoroughly enjoy many happy years to come.

The Patient and His Job

By RONALD E. LANE, M.D., F.R.C.P.

Nuffield Professor of Occupational Health, University of Manchester.

The first of three Clinical Lectures delivered at Guy's Hospital Medical School on Thursday, November 9th, 1950.

LADIES AND GENTLEMEN.—In the few lectures I have been allotted I want to talk to you about the patient's working life, and to show you how this may affect him, how it may account for his illness and how it must always be borne in mind in treatment. I should like to interest you in occupational medicine, but if I don't succeed in that I want to leave you in no doubt that the patient's occupation must be carefully considered if we are to do our job well as doctors.

I know how difficult it is to give this aspect full weight in a medical school. Here your patients are confined within the four walls of a great hospital. You are accustomed to see them served up to you in a hospital bed, wrenched from their environment and often even divested of their own clothes. We are apt to forget that our patient is a husband or father, a wage earner or perhaps a football fan, but I suggest we cannot afford to forget these things if we are going to give our patient efficient treatment. Here he is, a product of his heritage, endowed with a particular biochemistry, having certain hopes and fears, and acted upon by various forces from the world in which he lives—arising perhaps in his home, perhaps at his work or perhaps from his leisure. The individual attempts to establish a state of equilibrium between his environment and himself. The ever-changing adjustment necessary represents his life. Sometimes the inter-action between the individual and his environment gives rise to special stresses, and the body's reaction to this may be called disease, and this brings the patient to one of your hospital beds. Take a simple case of accident—a definite trauma applied to a healthy young man of 20. The results may be severe bruising about a joint, from which he completely recovers in three weeks. Another young man of the same age has an identical accident with identical trauma, but the result may be quite different because he has a psychoneurotic personality and develops a neurosis which may keep him off work for months, or even years. Or supposing your patient had his accident at 50 instead of at 20, and then with identical trauma there may be a fracture, and in any case healing is much slower. The disease picture is different because the individual has changed with the passing years. In these three examples we have kept the trauma constant—the environmental factor was unchanged, but different results and different illnesses were encountered because the patient was made of different stuff. Now let us take another example, and this time we will keep the individual constant and submit him to different work stresses. Take a young woman whose inherited resistance to tuberculosis is slightly below normal, put her to work in an office and she will probably be quite well. She will weather the dangerous years and marry, perhaps never any the worse for her inheritance. But suppose that girl comes to nurse in a big general hospital, with hard work, night duty and undue exposure to undisclosed Koch's infection in the ward. The result may not be so happy. The nurse may succumb to tuberculosis at 21 and this may be a very serious disease. All we have changed here is the working environment.

Now let me tell you of an actual case. A little while ago a student came to me for advice, and he gave me this history :— For the last year he had been getting pain an hour and a half after meals. The same pain often awakened him at night. The first attack lasted only for a week or so ; the second attack, which came three or four months later, extended over three weeks, and now he was in the throes of his third attack and was getting very severe pain after food. You know the history, you hear it every day, and you know the diagnosis. He had a duodenal ulcer.

Well, what are we going to do with this young fellow ? We X-ray him of course and confirm that he has a duodenal ulcer. We prescribe a diet and various alkalies, and we perhaps think we have finished with the case—but we haven't. It is essential to look at the way this medical student is living and the stresses he encounters. He was an only child of hardworking and worthy parents who were hard up and who had had considerable difficulty in keeping him at the University. At school he did well, was always top of his form, but at the University life was not so easy. He found himself just about in the middle of his class and could only maintain that position by very hard work, and he began to fear that he would not get through some of his examinations—there was a very big element of anxiety. He felt that perhaps he was " letting his people down." That was the first point. Next—he lived a long distance from the hospital, which meant nearly two hour's journey each way, with a change from train to bus—an awkward journey involving an extra four hours each working day. Then his meals were very irregular. In our University we have our mid-day lecture before instead of after lunch, and the student, instead of competing with postprandial somnolence, is fighting with that insistent gnawing hunger which may become all-pervading, and immediately after the lecture he dashes to the refectory to get what is left—all in a hurry. The medical student's life, as you know, is a pretty heavy one. He has a lot of hurdles to get over, and added to the physical factors of the journey and hard work were anxiety and mental stress. Now do you not think that all this may have had something to do with his attacks of epigastric pain ? I feel sure it did.

I have taken this example because you are medical students and this patient's way of life is well known to you. Suppose this patient had been a clerk or a miner, you would not have the faintest idea of the sort of stresses to which he is subject, unless you went to a great deal of trouble to find out from him. We know the stresses of our own occupations. I know something of yours because I've been a medical student, but though you are in daily contact with professors you probably won't fully appreciate the stresses of their occupation—the hours spent in preparing a lecture, for instance, and the anxiety as to whether it will really stimulate any one of those who hear it. And if you cannot understand the demands of the job of those with whom you are in contact, how much less can you understand the work stresses of people about whose jobs you haven't a clue—unless you take a very careful occupational history. When you take this history let it be full and see that your notes convey some idea of the job and its demands. It may be important, for instance, to note hours of work, special factors in the physical or psychological environment, and even the journey to work. Please don't be content with a cryptic description such as " engineer " or " labourer."

Occupation and Treatment

Work, then, can influence health and disease and must be considered when we are making our diagnosis. But this is not all. Work is a physiological and psychological necessity for most of us. Supposing as a medical student you get an illness, what happens ? First of all you are pleased to get to bed while you feel acutely ill, but as you begin to improve you miss the fact that you are not occupied, you miss the support of the group, and you begin perhaps to get a bit anxious about what you are missing, just as a workman gets anxious about the wages he is missing—very much more anxious perhaps than the medical student. As a patient you feel " out of it," and only when you get back to the working group is life fully restored.

If the medical student is away very long he may slip into a comfortable feeling of satisfaction with this new life, just letting the world go by, content with the comfort and not unduly disturbed at being a passenger. We commonly see this in patients who become over-hospitalised. If a student gets tuberculosis or poliomyelitis, these are the problems that arise and are the concern of his physician, whose aim it is eventually to restore this man to work and to his own job if possible. We aim at getting him back into the fold, into medicine, because we know how important that is for his morale and it is a very good thing that we should try our utmost to do so. But I wonder if we take the same trouble about the skilled workman, who may be just as keen on his craft and to whom getting back means just as much. It is important that we remember that it is a bad thing to take a man from a job after an illness if we can possibly avoid it. The sooner we get him back into the swim, with the support of his workmates, his fellow students or working group, the sooner he will get better, and until then he is not likely to be restored to health and our job is unfinished. He is not fully treated until you have achieved this; it is part of your responsibility as a doctor. I suggest that no surgeon or physician has fully discharged his duty until the patient is back at work on a job, doing the best available work he can do and earning a wage.

Sometimes the patient is so disabled that he cannot return to his old job, and a new and suitable one must be found. Our duty to this patient does not finish when we prescribe a diet or some special nostrum. It may in these circumstances be necessary to prescribe suitable work (though this is less frequently necessary than some doctors think). When such a change is necessary we try to find a job which is within the patient's capacity and at which he can continue to be a normal member of society, earning a wage; and I would emphasise this question of " earning a wage," it is of the greatest importance to most people. Cabot has said of it, " So far no one has thought of so convenient and convincing a way to wrap up and deliver at each citizen's door a parcel of courage for the future and a morsel of self-respect which is good for the soul." It is not enough to order " light work," that is like writing a prescription without any quantities or directions, it means exactly nothing. There is machinery now by which you can be most precise about the sort of work you want your patient to do. You have only to fill up a form —D.P.1—and you can detail the sort of job you as a doctor think a man should have, and very often that prescription is infinitely more important than the one you write for the dispensary.

We see, then, that work is very often important in determining whether a patient gets ill or not, and it is certainly of great importance in his treatment. It is for that reason that we must consider it carefully in arriving at a diagnosis, and in deciding the treatment we advise for our patients.

THE WORKING FORCE

This is all by way of introduction. I should like now to show you something about work—not that I am suggesting you are unfamiliar with it—something of the work that is carried on in this country.

In Great Britain at present there are some 23 million people gainfully occupied, and this takes no account of the millions of housewives whose work is domestic and unpaid. About 4 million are in basic industries—the things on which we depend, such as mining and agriculture. About 8 million are engaged in manufacturing processes; the rest include the distributors and the professional classes. Of the 23 million people at work rather less than one-third are women. The female worker has a special set of problems; she is, however, specially protected by factory legislation, her hours of work in the factory are limited and there are certain jobs she is not allowed to do. No doubt during the next year or two we shall have a great many medical problems arising because many of our women are being taken into industry under the re-armament programme, and will be undertaking two jobs—one in the factory as well as that in the home. Then we have rather less than 1,500,000 children and young people in industry. They too have special protection in their work. There are also an increasing number of old people in our population and at work. Now that we have penicillin and the antibiotics the span of life will be raised still further. That in itself is producing a number of important social problems, one of which is the employment of these older people. It is important, and good from every point of view, that those of the older age groups should continue to work if they can, but their employment raises special health problems as well as problems in industry.

SOME EFFECTS OF WORK

The work may be accompanied by special dangers. There may be a high accident hazard or there may be a danger of some industrial disease. The materials handled may give rise to dermatitis or to malignant disease—some lubricating oils, for instance, give rise to epitheliomatous ulceration, while certain chemicals may give rise to bladder cancer. Other occupations involve exposure to dusts which produce a lung fibrosis, and others to fumes that produce systemic poisoning. These dangers of accident and industrial disease are the *direct* result of the occupation. There are, however, indirect results of conditions of work which may equally affect the patient and which are much more commonly encountered—long hours, irregular shifts, undue fatigue from physical or psychological causes, psychological stress as a result of a difficult boss or an uncongenial working group. These factors are not specific, but they can profoundly affect the quality of the life that is led. This can be taken still further, not only can adverse factors of this type produce low morale in a working group, which has a bad effect on health, but undoubtedly high morale has a good effect. Those of us who have served in the forces know the great difference in the sense of wellbeing and of happiness that results from belonging to a good unit as compared with a bad one—and surely this is something positive. Is this not a contribution to positive health? (A much maligned term, but a real entity in which we as doctors should be interested if we do our work properly).

ACCIDENTS

I now want to tell you something about accidents. In hospital we see the end results of these, the severely injured man who may have been crushed at work, or the pathetic child who has been knocked down by a car. We are at the receiving end and are interested rightly in the methods of treatment we can best adopt. I wonder if we ever think of what is being done to prevent these accidents, and along what lines further thought and action should be directed if we are to be more successful in this sphere. Just let us look at the size of the problem. There are about 1,000 fatal accidents in our factories and mines each year, and 350,000 sufficiently severe to cause absence from work for 3 days or more. In addition there are about 15 million less severe or minor accidents which cause varying degrees of pain and economic loss.

When machinery was first introduced it was allowed to work its havoc on those who came near it to such an extent that 100 years ago, when Engels visited Manchester, he described a walk round the streets as like " being in the midst of an army just returned from a campaign," so much maiming and loss of limb did he see. Slowly legislation has done much to reduce the toll of life and limb taken by our industrial machines, and at present probably only some 15 per cent. of work accidents are due to mechanical causes—the remainder are due to the human factor.

It is interesting to compare work accidents with home and road accidents. In 1948, in the home, there were almost half as many deaths again (1,484) as from accidents at work (1,030), while road deaths were nearly 3 times more common than those occurring at work. It would seem, therefore, that life is in greater danger away from work than at it, but it must be remembered that the period for these accidents to occur is longer and the population exposed is much larger, including as it does, children—who in fact account for a great many of these fatal accidents. For instance, 14 per cent. of all deaths of children between 5–15 occur as a result of a road accident. It is the highest single cause of death for that age group, even surpassing tuberculosis. This is a sobering thought and surely one which we as doctors should publicise. Road accidents are a scourge to our modern community, taking the place of typhoid and smallpox in the past, and it is, I suggest, a subject in which we should be concerned.

Let us now turn back to our main concern to-day—the accident at work. Despite legislation these have remained fairly steady over the last 30 years. There has been a higher rate during the wars, but this was to be expected in view of the conditions that obtained at these periods—an influx of inexperienced workers, longer hours and greatly increased industrial activity. Since the war we have settled down to our pre-war level, it is true that industrial activity is greater and that probably the figure per man-hour worked shows a slight improvement, but the curve doesn't show any dramatic improvement and we must ask why.

Is the reason to be found in the fact that 85 per cent. of these accidents are caused by the human factor? This has been a matter for careful study over the last 30 years, and the Medical Research Council has been responsible for much of the best work on this subject.

Accidents, of course, are not distributed by pure chance. Under any set of circumstances certain people will get more accidents than others, and research has shown that given standard conditions 75 per cent. of the accidents will be sustained by 25 per cent. of the population. These people are more prone to accident than the rest.

A few years ago Farmer and Chambers showed that in London bus drivers those who experienced most accidents in the first year were the same men who continued to have a high accident rate over the next 4 years. They were the accident-prone drivers, and some of them were worse than others. So one way of reducing accidents might be for employers and Trades Unions to come to an arrangement whereby the accident-prone driver was transferred to a less hazardous job, where his unfortunate disability might have less serious results.

But this innate quality is subject to change, and the normal non-accident-prone man can have his liability to accidents markedly increased. For instance, in youth he is more likely to get accidents, and again in old age—fatigue and both physical and psychological factors in the environment will influence the liability to accident.

Some interesting work on flying personnel was carried out in the war, when it was shown that for fighter pilots the period of greatest freedom from accidents was between 23 and 33. Before this age, largely as a result of youthful exuberance and inexperience, the rate was high, and after this age performance fell away with the increasing decreptitude of the middle and late 30's. This did not apply to bomber pilots, whose efficiency for their particular type of flying persisted to a much later age.

I am giving these illustrations to indicate the breadth of the problem and the way it has been studied by physiologist and psychologist. Only in this way is it possible to deal with some of the fundamental questions involved. Medical science not only contributes to better treatment, but also to prevention ; this is the logical approach to so many of our medical problems.

INDUSTRIAL DISEASES

Occupation may lead to certain well defined industrial diseases. When we look at the size of the problem we find it is comparatively small—only 20,000 cases in a year. What are these diseases ? Those of the miner rank highest ; the " beats " (cellulitis affecting knee, elbow or hand), miner's nystagmus and pneumoconiosis accounting for more than half the total. Dermatitis is responsible for another very large section of these cases. The cases of fibrosis of the lung arising from exposure to siliceous dusts continue to present a big problem. Many of the old industrial diseases have well nigh disappeared. Fifty years ago we had over 1,000 cases of lead poisoning each year ; last year we had 49, and this is true of others. But as one disease disappears a new one takes its place—the pattern changes. We are only beginning to appreciate the extent to which occupational exposure to certain chemicals can give rise to malignant disease. New hazards from new chemicals arise every day, and the extension of the use of X-rays and other forms of radiation in industry is presenting special problems to industrial medicine. In future lectures I shall be discussing some of these problems in an attempt to show the principles which guide us in preventing some of these very dire diseases. The principles which guided those working in this field in the past can be applied to our new industrial diseases just as effectively as they have been applied to the old ones. Not infrequently attention is first directed to an industrial health problem by the general practitioner—he can only do this if he is alive to the possibilities.

I have covered a lot of ground in an attempt to give you an idea of the subject, first to show you why you should be interested in occupation if you are to be a good doctor, and second to give you a broad picture of the field. It is obvious that here prevention is the keynote to success. If an industrial disease develops we have failed.

We as doctors are interested in people, and part of the satisfaction we get from our job is in giving comfort and healing to our patients. This type of emotional satisfaction derives from the individual patient. For many of us it must be supplemented by a deeper satisfaction derived from service to the group—this service includes the prevention of many preventable conditions. We cannot divorce clinical work from prevention, these are two aspects of a single discipline, and industrial medicine provides especially good opportunities to combine the two.

Obituary

HERBERT FRENCH.

Herbert French, C.V.O, C.B.E., M.A., M.D., F.R.C.P., Consulting Physician to Guy's Hospital, died on January 1st, 1951, in London at the age of 75.

He was born in Newcastle-on-Tyne on November 11th, 1875, where his father was a merchant.

He was educated at Dulwich College and Christ Church, Oxford, to which he gained an open scholarship. It was at Christ Church that he met the son of Sir James Sawyer, a physician of Birmingham, whose daughter Amy, he married. He came to Guy's with the University Scholarship in 1898 and was appointed Assistant Physician to that hospital in 1906, and full Physician in 1917. He gave the Goulstonian Lectures in 1908. For many years he was physician to H.M. Household. He retired from professional life in 1929, when still in active middle-age, and devoted himself to his property in Surrey where he developed fruit farming, cider and chutney making on a large and profitable scale. His wife died in 1946 and he re-married two years ago. He leaves a widow, son and daughter.

French's striking personality and his determination to succeed were apparent to all who met him in his early days at Guy's. His interest in the financial side of his work can probably be traced to the influence of his father and of his Scottish mother who was successful as an artist. Already he showed astonishing power of attention to detail and his delight in the problems of differential diagnosis. As a house physician he started collecting notes, sketches and photographs of cases of interest, thus providing the core of the book which was later to make him famous. Soon after election to the staff at Guy's he developed pulmonary tuberculosis and went for some months to Cornwall, where his love of the sea was developed. Characteristically he decided that the disease should not deflect him long from his work. Apart from sleeping out of doors on the roof of a flat in St. Thomas's Street and taking short holidays at Worthing, he took no other steps to further convalescence. He made a full recovery and, in fact, developed a physical health and strength which were the envy of those who met him in later years. During his period as assistant physician his out-patient teaching, and still more his post-mortem demonstrations, attracted a large and eager crowd of students. As a fluent and dramatic lecturer who could illustrate on the black-board rapidly and accurately he had no equal.

French was a man of great determination, forceful character and egotism. When told it would be impossible to write a satisfactory book on symptoms, he regarded this as a challenge. With the aid of his copious case notes he produced his Index of Differential Diagnosis of Main Symptoms. Whatever may be thought of the value of such a work, it will be agreed that as a prodigious personal achievement it has no parallel. The index underlines his astonishing attention to detail. Its preparation, with its network of cross-references, occupied a year and involved half-a-million entries. It was carried out almost entirely in his car when being driven to consultations for which he was in constant demand.

The first phase of his professional life ended early in the first World War. He was never tired of telling the story of how he was appointed as Consultant to a military hospital at Aldershot just as his colleagues decided it was his turn to join the R.A.M.C. and start from scratch. He dined with an influential patient the night before he was to receive this decision and secured the coveted appointment. He was now in a position to extend the scope of his clinical experience while fostering an ever-increasing consulting practice which, by the end of the war, was probably one of the largest in the kingdom.

The asceticism of his early days had by now gone by the board. All anxiety about pulmonary disease had vanished and the joy of a full social life only added to his zest for professional advancement. His most noteworthy contribution to medicine arising from his army days was a superb clinical description of the epidemic of influenza which swept the world in 1918.

He received the rank of Lieut.-Colonel, a high status for an army medical consultant in those days, and clearly delighted in his elevation. He used the title for many years after retiring to civilian life and even in the third or non-professional phase of his career.

I knew him first soon after the end of the first World War, when he was on the crest of success. I viewed him from afar as an immaculate figure dressed in a grey " topper " and grey dress clothes emerging from an enormous grey car. He would sweep into the ward and conduct a round, often instructive and amusing and never dull. A favourite remark when some new method of investigation or treatment was suggested by his registrar was, " I would never do to my patient what I would refuse to have done to me were I suffering from this illness "—a guide which might with advantage be adopted by some of our progressives.

His patients loved him. To each he devoted his full attention, always gave an encouraging word and delighted them and his firm by demonstrating what steps to take to procure comfort to the sick.

As I have said before, his attention to detail was remarkable. He was prepared to show the correct way to adjust a nightdress to allow of full examination without its removal, or to discuss the administration of enemata and their composition, or the making of a linseed poultice, showing a knowledge of work which we lesser mortals are apt to leave entirely to nurses.

A house physician who rather rashly assumed, and made it evident, that French would not wish to teach on a neurological case, as being outside his scope, soon discovered his mistake. The firm was taken into the adjoining theatre and provided with paper and pencils. French then proceeded to draw in great accuracy and to make his H.P. and clerks copy, sections of the cord at different levels and to enumerate the signs arising from various lesions at these points. After an hour it was the firm which was exhausted.

It is no wonder that he was in constant demand for consultations with general practitioners. He always had something to offer, never let the doctor down, and exuded an atmosphere of efficiency and optimism even when faced with the most hopeless case. When driving a doctor back from a consultation his favourite pastime was to demonstrate how beer could be poured into a glass without spilling a drop though travelling at high speed.

His third phase, when retired to the country, was characterised by the same attention to minutiæ. He gave me a lecture on the right and wrong way to stir a vat of apple pulp, pointing out that the old hands did it the wrong way, centrifugally as it were, and thus splashed a lot of valuable material over the side.

Throughout his career he never allowed his private work to interfere with his devotion and attention to his hospital. There were some who criticised him for being too interested in financial gain, their strictures being tinged as often as not with jealousy. French was quite devoid of the hypocrisy which was rather widespread in those days in respect of money matters. He often told me that he knew he had more of a commercial instinct than many of his colleagues, but he argued that if his main thought was to help the patient his second wish was to have enough money to live comfortably and to provide for his family. He was always ready to temper the wind to the shorn lamb and many doctors and students have grateful memories of his generosity.

With characteristic dramatism he retired at the age of fifty-five, sold his house and everything in it—even to his stethoscope, and retreated to Newdigate. Here he was able to enjoy the delights of farming, cider, and chutney making and short holidays on his yacht. Of course, he had taken his master's certificate and grasped with the usual lucidity the intricacies of navigation both by day and night.

The death of his wife a few years ago was a great blow to him, but he faced this with the same indomitable courage which he showed in his final illness. His happiness was restored when he married again some two years ago, but a painful and fatal illness struck him last autumn and he ended his days in the hospital he loved and served so well.

A.H.D.

Out-Patient Department

Appointments for patients to attend at the clinics listed below may be made by letter, personal application or telephone to the Appointments Clerk, Out-Patient Department, Guy's Hospital, S.E. 1. Telephone HOP 3500, Ext. 301–302.

Monday

Morning

Medical	Dr. Baker
Surgical	Sir Heneage Ogilvie
Skins	Dr. Forman
Children	Dr. MacKeith
Varicose Veins	Mr. Glover
Psychological Medicine	Dr. Stafford-Clark

Afternoon

Surgical	Mr. Blackburn
Orthopædics	Mr. Batchelor
Orthopædics and Fractures	Mr. Stamm
Ear, Nose & Throat	Mr. Cann
Medical	Dr. Kauntze
Skins	Dr. Barber and Dr. Forman
Eyes	Mr. Law

Tuesday

Morning

Medical	Dr. Grant
Surgical	Mr. Grant Massie
Eyes	Mr. Morgan
Neurological	Sir Charles Symonds
Psychological Medicine	Dr. Munro
Gynæcological	Mr. Cook

Afternoon

Surgical	Mr. Lawrie
Genito-Urinary	Mr. Kilpatrick
Endocrine	Dr. Bishop
Diabetic Clinic	Dr. Hardwick
Ear, Nose & Throat	Mr. Reading
Asthma	Dr. Kauntze
Skins	Dr. Moynahan

Wednesday

Morning

Medical	Dr. MacLean
Surgical	Mr. Wass
Skins	Dr. Forman
Children	Dr. Evans
Gynæcological	Mr. Blaikley and Mr Lewis (alternate weeks).
Psychological Medicine	Dr. Stafford-Clark

Afternoon

Hearing Aid Clinic	Mr. Cann and Mr. Reading
Surgical	Mr. Atkins
Fractures	Mr. Grant Massie
Skins	Dr. Barber
Orthopædics	Mr. Stamm
Medical	Department of Medicine
,,	Dr MacLean

Thursday

Morning

Medical	Dr. Hardwick
Surgical	Mr. Eckhoff
Ear, Nose & Throat	Mr. Cann
Neurological	Dr. McArdle
Asthma	Dr. Kauntze

Afternoon

Eyes	Mr. Law
Diseases of the Lung	Dr. Boland
Gynæcological	Mr. Gibberd
*Cardiac Clinic	Dr. Campbell
Surgical (Thyroid)	Mr. Slesinger

4.30 p.m. Diabetic Clinic Dr. Hardwick

Friday

Morning

Thoracic	Mr. Brock
Ear, Nose & Throat	Mr. Reading
Medical	Dr. Mann
Gynæcological	Mr. McNair
Neurological	Sir Charles Symonds
Children	Dr. MacKeith
Psychological Medicine	Dr. Munro

Afternoon

Genito-Urinary	Mr. Doherty
Fractures and Orthopædics	Mr. Batchelor
Eyes	Mr. Morgan
Medical	Dr. Baker

Saturday

Morning

Skins	Dr. Moynahan
Medical	Dr. Kauntze
Surgical	Mr. Glover

Daily

Dental	Morning and Afternoon.

*Appointments made only by special arrangement with the Cardiac Department

Correspondence

The Residents' Play

SIR,—The Residents' Play for 1951 has now almost been written! It will be produced in the Physiology Theatre on the evenings of Tuesday, February 20th—Friday, February 23rd, inclusive.

Owing to the greatly increased cost of post-war productions an appeal for funds was made last year through the *Gazette*. The resulting generosity just enabled expenses to be met, and we very much hope there will be a similar excellent response this year.

The seating in the Physiology Theatre is unfortunately extremely limited, but we hope to accommodate as many people as possible. We should like to apologise in advance to all those who are unable to get seats.

It would be a great help if donations and applications for seats, stating number of tickets required, and the dates preferred, could be sent as soon as possible to the President of the Residents, The College, Guy's Hospital.

Yours, etc.,

W. VAN'T HOFF,
President of the Residents.

Sport

ASSOCIATION FOOTBALL

Fixture List, 1951

FIRST XI

January		
Sat. 13th	London School of Economics (University Cup).	Away.
,, 20th	Old Stationers.	Home.
,, 27th	Old Lyonians	Away.
Wed.31st	Croydon Athletic.	Home.
February		
Sat. 3rd	Ibis.	Home.
,, 17th	Kew Association.	Home.
,, 24th	Old Parkonians.	Home.
Wed.28th	Hospital Cup : Semi-final.	—
March		
Sat. 3rd	Old Parkonians.	Away.
Wed. 7th	Reading University.	Home.
Sat. 10th	West Wickham.	Away.
,, 17th	National Provincial Bank.	Home.
,, 31st	Cuaco.	Away.
April		
Sat. 7th	Kew Association.	Away.
,, 21st	Aquarius.	Away.

SOUTHERN AMATEUR LEAGUE

Guy's *v.* West Wickham

At H.O.P. Result—Lost 3—8

6th January, 1951

The score was somewhat unkind to the Hospital and although West Wickham deserved to win it was a question of every defensive mistake by the Hospital resulting in a goal, whereas the attack had some wretched luck with their chances.

The young visiting forwards started off playing fast open football and quickly opened their account and half time came with the score 4—0. The second half was very even and with the score 6—0 Guy's came back into the picture and scored three quick goals.

Two were defensive blunders, mainly slow clearances, and Wickham made their tally eight.

The final whistle came with Guy's attacking, although with only ten men as Harris had been forced to leave the field with an injured leg.

HOCKEY

Guy's *v.* Westcliff

At H.O.P. Result—Won 2—0

30th December, 1950

Guy's team was a cross-section of the Hockey Club. Four first team players, three second team players with members of the third and fourth team, made up the side. The teams played well together. Guy's had the worst of the game in the first half, both sides missing opportunities for scoring. During the second half Westcliff pressed hard. Guy's defence did not clear soon enough or hard enough. The strong pressure was resisted by Linahan at full back and Bishop in goal. It would seem that Westcliff deserved to draw, but their forwards were slow to take their opportunities and only one shot looked dangerous. This was a very enjoyable game, particularly enjoyable because members of the club had an opportunity to play with members of other teams.

BOXING

Guy's *v.* Trinity College, Dublin

Result—Drew 4—4

An inter-club contest was held in the Pavy Gymnasium on December 8th, 1950.

Guy's put out an improved team for this, their second match, and did well to hold the Irishmen.

Results

Guy's		*Trinity*
W. Watson	beat	M. McKormack
R. A. Peebles	lost to	A. Murphy
A. N. Greenwood	lost to	A. Rajab
T. M. Winstanley	lost to	J. Kostick
A. H. Atkinson	beat	G. Harrison
R. C. C. Thompson	lost to	P. Shanks
D. Lipington	beat	J. Hardboard-Webster
M. Bishop	beat	R. Clinch (disqualified)

Hospital Information, etc.

APPOINTMENTS VACANT

Applications are invited for the appointment of **Junior Lecturer to the Anatomy Department.** Duties to commence as soon as possible. Salary £650 p.a. Forms of application obtainable from Medical School Office and should be lodged with the Dean not later than 16th January, 1951.

NOTICES

The Annual Dental Clinical Meeting will be held in the Dental Department on Saturday, 3rd March, 1951, and the Dental Society Dinner will be held in the evening. A detailed programme of the Meeting will be published in the *Gazette* on 10th February and the notices regarding the Dinner will be circulated in the near future.

A copy of Wintrobe's Hæmatology Textbook borrowed from the Library of the Royal Society of Medicine has gone astray at Guy's. If all departments and individuals would search their shelves and if they find it, leave it at the front lodge or with the Wills Librarian, the loser of the book would be most grateful. He hesitates to offer a reward but on the return of the book will express his thanks by giving £1 1*s.* 0*d.* to any charity named by the Editors.

UNIVERSITY OF LONDON

The title of Professor of Clinical Pathology has been conferred on Dr. Montague Maizels, reader in Clinical Pathology at University College Hospital Medical School.

PASS LIST

UNIVERSITY OF LONDON

Third (*B.D.S.*) Examination in Dental Surgery
December, 1950

Honours

*H. Levinson

*Distinguished in Dental Surgery

Pass

D. M. J. Lyons
K. F. C. Muncey

Second Examination in Dental Surgery

December, 1950

Part I

G. W. Cowley
J. J. Hall
E. W. Lunn
B. C. Rich
J. C. Stephenson
D. R. Taylor
D. E. G. Thomas
W. R. Thomas

Part II

F. Allan
D. J. Chant
Margaret F. Gill
R. C. Jeffery
Thomas Smith
I. L. Thomas

UNIVERSITY OF CAMBRIDGE

Michaelmas Term, 1950

Final M.B. Examination

W. V. Agnew
J. A. C. Bamford
A. P. Blower
J. W. Bradbeer
N. P. Burns
A. S. F. Butcher
W. G. Davies
B. O. L. Duke
A. E. Gibbs
P. H. Gorodi
A. S. Harris
J. Hurst
K. G. P. MacKenzie
V. J. Marmery
D. B. Murray
J. R. Rees
G. A. Taylor

NEW YEAR'S HONOURS

Knight Bachelor

William Kelsey Fry, C.B.E., M.C., M.D.S.Durh. M.R.C.S., F.D.S.R.C.S.

C.B.E. (Civil)

Geoffrey Marshall, O.B.E., M.D.Lond., F.R.C.P.

APPOINTMENT

A. G. Ellerker has been appointed Senior Surgical Registrar to the Royal Free Hospital.

PAPERS BY GUY'S MEN

Wilson, Edric. Melæna from Heterotopic Gastric Mucosia in the Ileum. *Lancet*, **1950**, ii, 855.

Stewart, I. McD. G. Coronary Disease and Modern Stress. *Lancet*, 1950, ii, 867.

McEvedy, Peter G. Femoral Hernia. *Ann. R. Coll. Surg. Eng.*, 1950, **7**, 484.

Sears, W. Gordon. Linctuses. *Practitioner*, 1951, **166**, 91.

De Navasquez, S. Experimental Pylonephritis in the Rabbit produced by Staphylococcal Infection. *J. Path. Bact.*, 1950, **62**, 429.

Crabb, H. S. M. A Device for Taking Sectional Impressions in Anterior Restorations. *Brit. Dent. J.*, 1951, **90**, 21.

Matthews, E. Facial Prostheses. *Brit. Dent. J.*, 1951, **90**, 11.

Lane, Ronald E. The Education and Function of the Industrial Health Team (The MacKenzie Industrial Health Lecture). *Brit. J. Industr. Med.*, 1950, **7**, 161.

CHANGES OF ADDRESS

Miss Joan Frischer, P.M.R.A.F.N.S., R.A.F. Hospital, Changi, Singapore.

I. A. Nelson, Esq., L.D.S., 10, Hanover Crescent, Brighton, Sussex.

D. M. Rahilly, M.R.C.S., L.R.C.P., 63, Finborough Road, Stowmarket, Suffolk. Tel.: Stowmarket 358.

BIRTHS

GILLMAN.—On December 11th, 1950, at The Fielding-Johnson Private Hospital, Leicester, to Patricia, wife of Noel Gillman, M.B., B.Ch.—a second son (Peter Kenneth).

HANCOCK.—On December 24th, 1950, at Masons Hill, Bromley, Kent, to Joan (née Phillips), wife of T. J. Hancock, B.D.S.—a sister for Philip (Dale Moyra).

MARRIAGE

JACKSON-WILSON.—On Saturday, January 6th, 1951, at All Saints Church, Eastbourne, Sussex, Michael C. H. Jackson, M.B., B.S., to E. Joan Wilson, B.Sc.

DEATHS

FRENCH.—On January 1st, 1951, Herbert French, C.B.E., M.A., M.D., F.R.C.P., of Cudworth Manor, Newdigate, Surrey, aged 75 years.

GRIFFITHS.—On December 26th, 1950, David Roger Thomas, L.M.S.S.A., M.O.H., New Quay, Cardiganshire, in his 79th year.

WARRICK.—On December 21st, 1950, Robert Walter Warrick, M.B., B.S., of 3, St. German's Place, Blackheath, S.E.3.

WILLIAMS.—On February 6th, 1950, Sydney Williams, L.D.S., R.C.S., of 34, Bunce Grove, Tottenham, N.17.

Eds. {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1631 *27th January* 1951 *Ninepence*

PASSIM

"WHEN they come to build the new Guy's," declared one of our most outspoken of surgeons recently, " they will have to think in terms, not of one hospital, but of two—the first, of course, to receive those who fall ill and the second, surely, to accommodate those afflicted with the complications of modern-day therapy ! " Though we are as loathe to associate ourselves with his scepticism for contemporary medicine as we are to subscribe to his practical deductions therefrom we are nevertheless convinced that, in the first place, a clear idea of the proper functions of a hospital is a matter of prime importance.

According to Thomas Guy's will, signed and sealed on 4th September, 1724, his Hospital was to " receive and entertain therein four hundred poor persons, or upwards, labouring under any distempers, infirmities or disorders, thought capable of relief by physic or surgery ; but who, by reason of the small hopes there may be of their cure, or the length of time which for that purpose may be required or thought necessary, are or may be adjudged or called incurable." But, as Wilks and Bettany subsequently commented, " entire discretion was given to the executors and trustees as to whom they should admit," and, as Sir William Hale-White was later to observe, " from its foundation Guy's has been used as an ordinary hospital."

Today, as we see it, the purpose must be fourfold—to provide a haven of care, relief and attention for the ailing who cannot be looked after in their own homes ; to offer all facilities for specific treatment in accord with modern concepts (and, in this connection, adequate observation and control, with all the laboratory complications which are thereby implied, become a first essential) ; to provide facilities for research ; and finally, to allow for the teaching of students.

Taking each of these items in turn, it is clear that the constant nursing of the sick and the alleviation of their pain and discomfort is a progressively increasing medical and administrative problem. Clearly, it is cheaper domestically and relieving of the family burdens as well for the aged and chronically ill to be kept in hospital rather than be looked after at home. Yet, putting extreme instances on one side, surely the home and not an institution is the place for those who need palliation and care rather than definitive treatment.

And that brings us to the second point. So resourceful are the surgeons and physicians at demonstrating their new abilities to carry out specific cures that their methods become even more elaborate and their demands still more exacting. To a large extent, only in a hospital with suitable ancillary services can they perform their wonders at all.

So far as research is concerned, much of it depends upon the opportunities which only a vast hospital can afford. Yet this is by no means entirely so. Under such conditions there tends to be a pre-occupation with advanced illness and anatomically morbid processes. If more emphasis could be applied to the occupational and environmental aspects of disease then, possibly, preventive medicine might become more of a reality than it is now.

Finally, as to teaching, we are still looking towards the times when students will become familiar with the conditions under which they are likely, eventually, to work, rather than allow them to delude themselves, as they do today, believing that medicine is a purely scientific study by the bedside or in the laboratory, using for their materials physiological and pathological entities entirely divorced from the surroundings which may well have contributed to their development.

The new Guy's, then, must be no " crystal palace " in elevated, if distinguished, isolation, but the focal point of a wide community. The " district " should be enlarged and encouraged so far as medicine generally is concerned and certainly not curtailed or discontinued as we believe is contemplated in regard to obstetrics. The influence of the Hospital should thus penetrate into the homes of its patients and not be party to the uprooting of them from their surroundings. Only for those cases in which special treatment is desirable should admission to hospital be arranged at all. The field of research might then extend naturally, in distinction to the present concentration upon increasingly detailed studies. Perhaps, then, as a logical consequence, the student would realise his association with humanity and not concern himself so much with the " diseased specimens " which appear before him in the wards and out-patients.

So much for the functions of the Hospital; now as to its form. The design finally conceived for the new Guy's is striking in its originality. That it is such a departure from English hospital convention is certain to disturb the more orthodox minded. But that, in itself, should constitute no fundamental objection. Even some of the most hallowed specimens of architecture in this country, the much-copied Tudor or the widely-acclaimed Gothic for example, may well have caused offence when they were first introduced. Time and acquaintance, whether for individuals or their surroundings, so often conduce to acceptance in the end. For a hospital, however, more is needed than mere functional satisfaction. Where the sick are concerned, what must be avoided is anything in the nature of Wells's " Shape of Things to Come " or the all-too-frequently perpetrated architectural villainy of the modern circuit cinema. Style, therefore, counts for something. It need not be of an established period, but it will derive only so long as there is both character and imagination in the architect's mind. As to the internal planning, this can never be regarded as final. The requirements of the layout change from year to year. Flexibility is thus a pre-requisite, together with that state of affairs which will allow of re-arrangement and adaptation without the usual turmoil, hammering, drilling and positively dangerous heaps of scaffolding and materials that so beset us everywhere at Guy's today. Last but certainly not least, do let us dispossess ourselves once and for all of that military system within the wards to which, again, Llewelyn Davies has so lately drawn attention in the *Gazette*, whereby practically all patients are confined to bed and these are arranged and ordered with nigh on parade ground precision.

That the new Guy's should arise, like the lodging of Shakespeare's Antonio, " in the south suburbs" and as close by the Elephant, is virtually agreed by all. That, in addition, work on it should begin within the lifetime of the present generation remains an earnest hope. At this stage, singleness of purpose and a determination to achieve are governing qualities at a premium. Our original founder showed us the way. After being granted the land for his " new hospital " in 1721, " Guy succeeded in getting the foundation of his intended hospital laid in the following spring (1722) : the building whereof was carried on with such expedition that the fabric was roofed before the death of the founder, which happened on the 27th of December, 1724."

Under present-day conditions, we agree, so many and varied are the authorities and experts whose advice and services are called for that deliberation by committee is truly inevitable. No longer is the simple partnership of benefactor, doctor and architect, as depicted in the well-known picture of " Thomas Guy conferring with Dr. Mead, the Physician and Mr. Stear, the Architect, upon the Plan for the Building " enough. Yet consultation can well become the very obstacle to action. It is timely, therefore, to publish a full account of all that has transpired to date on the subject of the Hospital rebuilding. For the exhaustive delving into the records thus entailed, for selecting the illustrations and for writing such an article, we are particularly indebted to the Clerk to the Governors. The next step—committees, individuals, authorities and, above all, money permitting—must be the laying of the foundation stone and, thereafter, completion " with the utmost expedition."

The Rebuilding of Guy's

By B. LEES READ, O.B.E., A.C.A., F.H.A., Clerk to the Governors

IT is not proposed to comment on events earlier than 1936 when, in the public appeal for funds made by Lord Nuffield in July of that year, one of the proposals for which funds were sought was " the rebuilding of the Surgical Block to provide 300 beds estimated to cost £214,540." It was stated then that the Surgical Block had been made to serve for over 200 years but that its life was coming to an end and the Architect reported that part of the outer walls was sinking. It was also desired at that time to include in the rebuilding programme provision for additional accommodation as it was realised that the number of beds available in the Hospital was insufficient for the needs of the Medical School.

It will, of course, be appreciated that in 1936 there was no thought of extending the Hospital to the east of Great Maze Pond as almost the whole of this area was covered by substantial and relatively modern warehouse and factory premises.

In October, 1937, a Committee of the Court of Governors which had been considering the possible rebuilding and reconstruction of the Surgical Wards considered a proposal for the demolition of the Wards, while at the same time retaining the two wings and the facade. A model was prepared by the then Architect of the Hospital setting out the effect of these proposals.

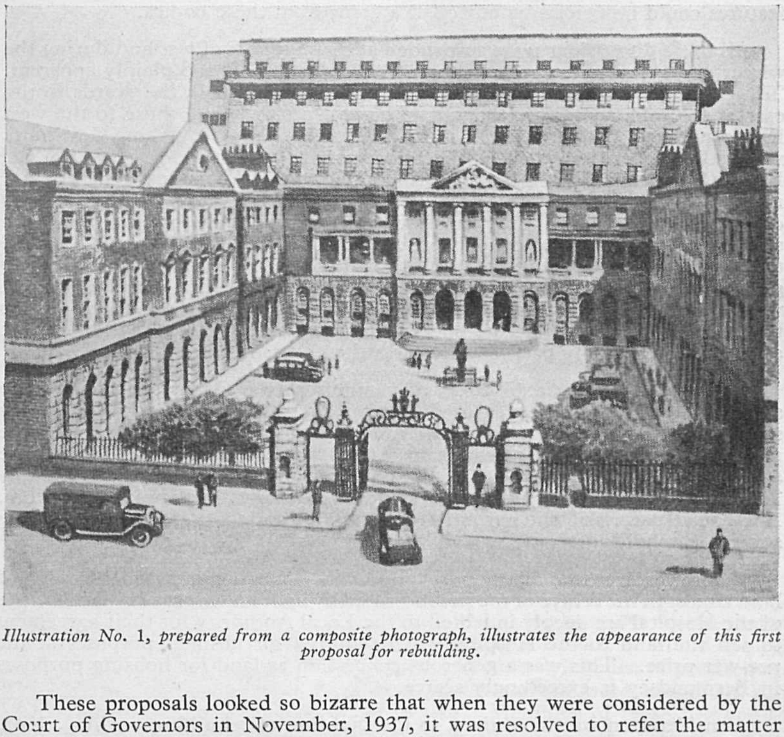


Illustration No. 1, prepared from a composite photograph, illustrates the appearance of this first proposal for rebuilding.

These proposals looked so bizarre that when they were considered by the Court of Governors in November, 1937, it was resolved to refer the matter back for further detailed suggestions for the erection of a new Surgical Block. Fresh consideration was to be given to the retention as far as possible of architectural features of the then existing buildings.

The Building Committee was empowered, if it thought fit, to invite designs from Architects other than the Hospital Architect and to call in outside experts. At a meeting of the Court in December, 1937, it was agreed that Lord Gerald Wellesley, F.R.I.B.A., be invited to confer with the Hospital Architect on the following terms of reference:—

(*a*) Whether it is practicable to preserve the Quadrangle in its present form and still provide the accommodation required in the new Surgical Block.

(*b*) Whether it is possible to include the existing Court Room, Committee Room, Staircase and Chapel in a new building should it be found impossible to preserve the architectural features of the Front Quadrangle.

(*c*) Whether any other scheme could be proposed, maintaining an external architectural appearance consistent with the architectural traditions of Guy's House.

A number of consultations and discussions on these proposals took place but no concrete proposals were ever submitted to the Court of Governors owing to the outbreak of war.

From the correspondence which passed at that time it was apparent that to preserve the façade while erecting behind it a modern hospital block would probably result in an architectural monstrosity, while to preserve in the interior of a new structure the then existing Court Room, Committee Room, Staircase and Chapel would entail a cost out of all proportion to that of erecting a new building and would also impose serious limitations on design. It was, however, decided to make application to the Pilgrim Trust and to the Society for the Preservation of Ancient Buildings to see whether the preservation of these features could be helped by advice or a grant from these bodies.

All these discussions were suspended at the outbreak of war and during the winter of 1940-41 the results of enemy action were only too plainly apparent. The east wing of the Front Quadrangle was a hollow shell, the wards to the east of the colonnade were thought to be past repair, while those to the west had also been badly damaged. In July, 1942, the Court of Governors received a report from the District Surveyor stating that the east wing of the Front Quadrangle should be demolished as it was a dangerous structure and might collapse into Great Maze Pond. The Court accepted the further demolition order while at the same time ordering the Architect to try to preserve sufficient of the Wing to enable the Surgical X-Ray Department to continue to function. At the same time, it was realised that the forces which had so grievously affected the Hospital had possibly presented an opportunity which would never otherwise have arisen and instructions were given to endeavour to acquire the whole of the site bounded by St. Thomas Street, Weston Street and Snowsfields, only part of which was then owned by the Hospital.

The plan (Illustration No. 2) prepared from the Ordnance Survey map shows the whole of the area in question; the key and different hatchings show those parts of the site used for hospital purposes before the war, the parts owned but not used and those parts which it has been possible to acquire as a result of the destruction of the buildings previously standing thereon— The sites on which buildings are still standing are marked with heavy black lines. A few small parcels of land have still to be acquired and there are also outstanding several leasehold interests.

Before the war the Bermondsey Borough Council purchased the plot of land almost in the centre of the site indicated by light hatching. The Authorities of the Hospital are deeply indebted to the Local Authority for their agreement to sell the land to the Hospital when required for hospital purposes at the pre-war price. This was a generous concession as land for housing purposes in Bermondsey is exceedingly scarce.

Consideration was next given to the question of rebuilding in May, 1943. Guy's House was then considered to be past repair and it was assumed without any further enquiry that there was no possibility of ever bringing the majority of the wards back into use as a permanent feature of the Hospital.

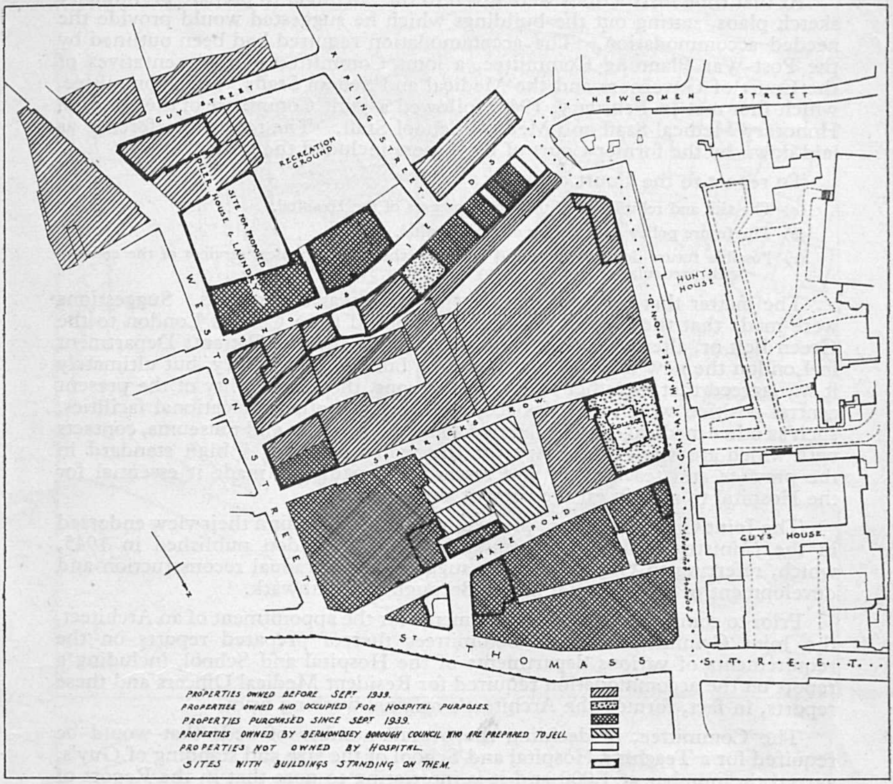

GUY STREET
KIPLING STREET
NEWCOMEN STREET
RECREATION GROUND
BOILER HOUSE & LAUNDRY
SITE FOR PROPOSED
SNOWSFIELDS
WESTON STREET
HUNTS HOUSE
GREAT MAZE POND
SPARRICKS ROW
COLLEGE
MAZE POND
GUY'S HOUSE
ST THOMAS STREET
PROPERTIES OWNED BEFORE SEPT 1939.
PROPERTIES OWNED AND OCCUPIED FOR HOSPITAL PURPOSES
PROPERTIES PURCHASED SINCE SEPT 1939.
PROPERTIES OWNED BY BERMONDSEY BOROUGH COUNCIL WHO ARE PREPARED TO SELL
PROPERTIES NOT OWNED BY HOSPITAL
SITES WITH BUILDINGS STANDING ON THEM.

Illustration No. 2.

At that time the Board received a letter from the Chairman of the Medical Committee, suggesting that the time was ripe for the selection of an Architect to prepare plans for the rebuilding of the Hospital (the then Architect having intimated his intention to retire after the war) and, further, it was felt that unless arrangements could be made before the end of the war to find someone suitable for this work the position might arise where everyone of sufficient standing would be engaged in other schemes and so would not be available to advise the Hospital. The selection of an Architect was put in hand at once. Names were obtained from the British Hospitals Association, King Edward's Hospital Fund and the President of the Royal Institute of British Architects.

The reputation and standing of the firms suggested were examined from various points of view, and especially to ensure in the first place that the individuals on whose work the reputation of the firms was built were likely to be available for a major rebuilding programme within the next five to ten years; secondly, that the size and experience of the firm was such as would qualify them for an undertaking of this magnitude. Eventually, the list of possibilities was brought down to five. Specimens of their work were examined and ultimately the list was brought down to two. Members of these firms were interviewed and finally the appointment was offered to Mr. Alner W. Hall, F.R.I.B.A., of Messrs. Young & Hall, Architects, of Southampton Row, London, W.C.1, who had been responsible for the rebuilding of the Middlesex Hospital.

At that time instructions were given to the Architect to prepare preliminary sketch plans, setting out the buildings which he suggested would provide the needed accommodation. The accommodation required had been outlined by the Post-War Planning Committee, a joint Committee of representatives of the Court of Governors and the Medical and School Staffs. This Committee, which first met in February, 1942, followed a joint Committee of the Hospital Honorary Medical Staff and Medical School Staff. The terms of reference as laid down by the former Court of Governors included the following :—

To report to the Court on :—

(*a*) The site and rebuilding of the whole or part of the Hospital.

(*b*) The future policy and staffing of the Hospital.

(*c*) Possible future developments and generally the future medical services of the country with particular reference to Guy's Hospital.

The matter that required first consideration was that of site. Suggestions were made that the Hospital should be removed from Central London to the Green Belt or, alternatively, that while retaining the Out-Patients Department in London the new ward blocks should be built in the country, but ultimately it was agreed that, together with other reasons, the accessibility of the present central position which includes accessibility to all other educational facilities, such as other medical centres, learned societies, libraries and museums, contacts with which are vitally necessary for the maintenance of a high standard in the practice and teaching of and research in medicine, made it essential for the Hospital to remain on the present site.

The Joint Committee were pleased in due course to find their view endorsed in the Ministry of Health Hospital Survey of London published in 1945, which, referring to Guy's Hospital, suggested the gradual reconstruction and development of the Hospital in the Borough of Southwark.

Prior to completion of the arrangements for the appointment of an Architect, the Joint Committee or Sub-Committees thereof prepared reports on the requirements of various departments of the Hospital and School, including a report on the accommodation required for Resident Medical Officers and these reports, in fact, formed the Architect's original working brief.

The Committee, in deciding the overall number of beds that would be required for a Teaching Hospital and School of the size and standing of Guy's, agreed the number at 1,000 and it is interesting to note that in the Report of the Inter-Departmental Committee on Medical Schools published by the Ministry of Health in 1944, 1,000 beds was stated to be the number that would be necessary for the proper working of an Undergraduate Medical School (Chapter 3, para. 27). The Authorities of the Hospital had, therefore, anticipated, as far as the size of the Hospital was concerned, the recommendations of the Committee that sat under the Chairmanship of Sir William Goodenough.

The question of the cost of the rebuilding scheme had, since the appeal of 1936, been left in abeyance, but in August 1944, the Court of Governors were informed by the President, The Right Honourable The Viscount Nuffield, that King Edward's Hospital Fund for London had, at his request, given a donation towards the Rebuilding Fund of Guy's of £250,000, this sum being the first instalment of the reversion to the King's Fund from the Nuffield Trust for Special Areas. The amount thus made available, apart from any possibility of State aid, ensured that at least a start could be made when conditions permitted this to be done.

The first sketch plans of the Architect became available in 1944 but were referred back for further consideration and re-drafting as it was felt that the inclusion in one building on the lines suggested of a Residents' College, a Dental Department and Wards, would not make a good working arrangement, particularly with regard to movement between one department and another. Over and above this, however, was the fact that the Hospital Authorities were informed by the London County Council that the suggestions on the County of London plan showing the new line of Snowsfields were tentative only and could not be used for planning purposes unless the Hospital was prepared to undertake the work of moving the road. Illustration No. 3 indicates the general outline of the proposal and in the south-east corner the dotted lines show the existing line of Snowsfields as distinct from the suggested new road

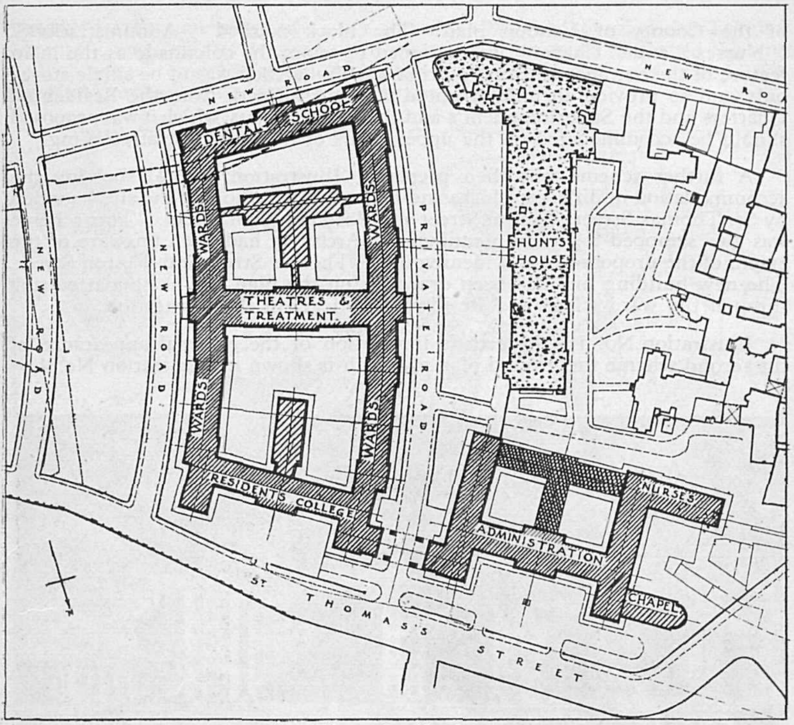

NEW ROAD
DENTAL SCHOOL
WARDS
WARDS
THEATRES & TREATMENT
WARDS
WARDS
RESIDENTS COLLEGE
NEW ROAD
NEW ROAD
PRIVATE ROAD
HUNTS HOUSE
NURSES
ADMINISTRATION
CHAPEL
ST THOMAS'S STREET
N

Illustration No. 3

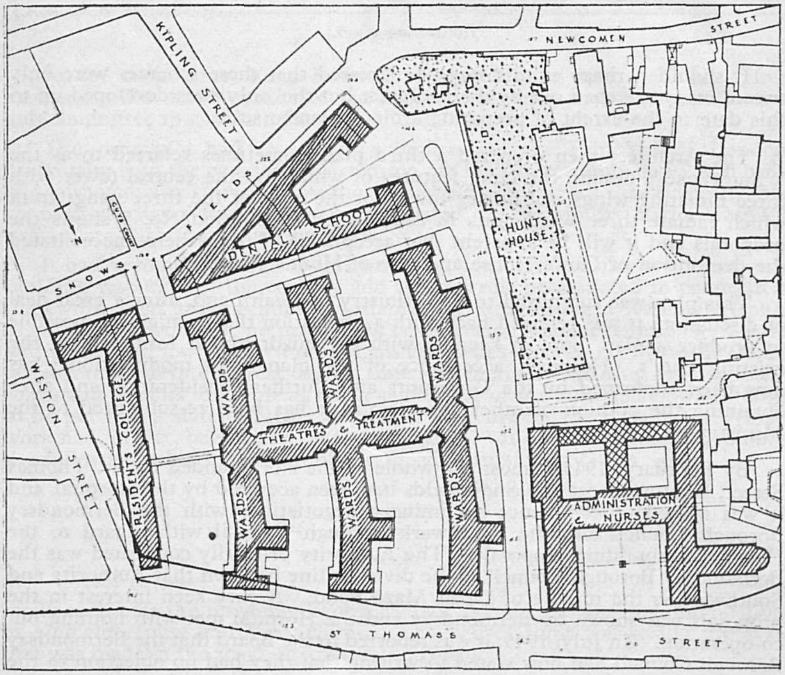
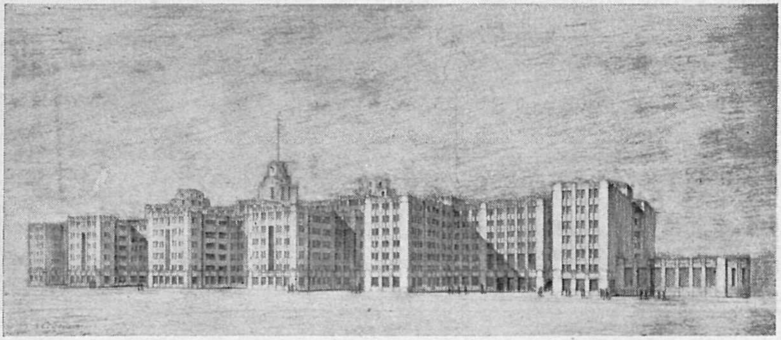

NEWCOMEN STREET
KIPLING STREET
FIELDS
SNOWS
DENTAL SCHOOL
HUNTS HOUSE
WARDS
WARDS
WARDS
WARDS
WARDS
WARDS
THEATRES & TREATMENT
RESIDENTS COLLEGE
WESTON STREET
ADMINISTRATION & NURSES
ST THOMAS'S STREET
N

Illustration No. 4.

of the County of London plan. The block marked "Administration," "Nurses" and "Chapel" was designed to retain the colonnade as the main feature of the entrance and that portion double-hatched was to be single storey only and so provide an uninterrupted view of the park from the Residential Quarters and the Superintendent's and the Matron's flats, which it was proposed should be accommodated on the upper floors of the Administrative Wing.

A further scheme was then prepared (Illustration No. 4) showing the accommodation in different blocks and taking up the whole of the site bounded by St. Thomas Street, Weston Street and Borough High Street. This scheme was also scrapped as, when planning, the Architect had been unaware of the extent of the proposed road-widening in St. Thomas Street and Weston Street. The new building line has been drawn in on the plan and is shown cutting through the ward wings and Residents' College, in the illustration.

Illustration No. 5 is the artist's impression of the external appearance of tht second scheme the ground plan of which is shown in Illustration No. 4.



(*C. Scriven, F.R.I.B.A.*)

Illustration No 5.

It should perhaps at this stage be stressed that these schemes were only two of many sketched out by the Architect but the only ones developed up to this date to the extent of preparing a block plan to scale.

The Architect then prepared a third plan, sometimes referred to as the "Snowflake" design, the chief features of which are the central tower with three radiating wings, subsidiary towers at the ends of the three wings from which radiate three ward units in each case. Illustration No. 5 shows the proposals and it will be apparent that acceptance of this scheme necessitated the demolition of Guy's House and also of Hunt's House.

This plan was submitted to the Ministry of Health and, after a great deal of discussion, it was referred back with a suggestion that it might be possible to produce a plan more in keeping with the quadrangular formation of the existing Guy's. However, acceptance of the plan (with modifications) has now been confirmed by the Governors after further consideration and after obtaining the opinion of other experts and it has been re-submitted to the Ministry of Health.

By February, 1945, almost the whole of the site bounded by St. Thomas Street, Weston Street and Snowsfields had been acquired by the Hospital and it was agreed to commence preliminary negotiations with the Bermondsey Borough Council and the Southwark Borough Council with regard to the Hospital's rebuilding proposals. The Authority primarily concerned was the Bermondsey Borough Council as the dividing line between that Authority and Southwark is the middle of Great Maze Pond. A very keen interest in the proposals was shown by Bermondsey and the Hospital met with nothing but co-operation. In July, 1945, it was reported to the Board that the Bermondsey Borough Council had now stated in writing that they had no objection to the proposed extension plans of Guy's and that they had notified the London County Council of this decision. Only recently it has been confirmed that the area shown as required for the rebuilding scheme has been " designated " for hospital purposes under town planning regulations.

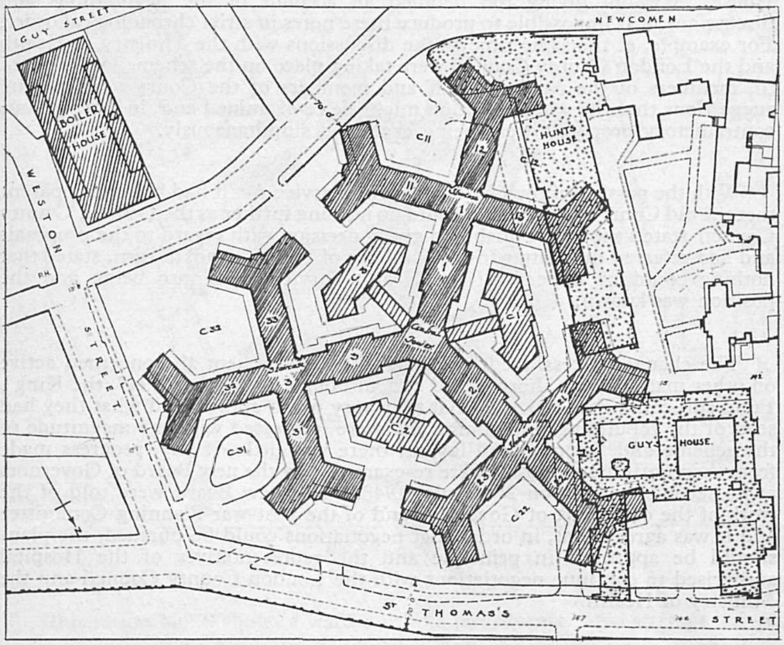


Illustration No. 6.

At the same time, King Edward's Hospital Fund intimated that, after examining the broad outline of the proposed scheme, they had appointed a sub-committee to consider the matter in detail.

The proposals had also been submitted to the Principal of London University with the case for the extension of Guy's to accommodate 1,000 beds and, although the University Authorities could not commit themselves in this connection, they stated that they appreciated the desirability of the Hospital proceeding with the rebuilding plans.

It had become apparent by this time that with the demands on the national building resources of the country and the controls necessitated in connection therewith, apart from pending legislation for establishing a National Health Service, there would be no prospect of commencing a major rebuilding scheme within the next few years. Force of circumstances accordingly made the Court of Governors devote a great deal of time and energy to securing the necessary funds and permits to enable as much as possible of the buildings now standing to be put into a state of repair and allow their use for the time being. This work had, in fact, been going on for some time. It may be interesting to note the following table of beds available for civilian sick at Guy's :—

1942	May	110	1945	April	244	1947	March	426
	June	140		September	295		October	450
1943	July	155	1946	Match	349	1948	March	492
	October	190		October	395		September	515
1944	October	212						

In each case the foregoing figures exclude private patients' accommodation in Nuffield House and York Clinic. The figures show the steady progress that was made in the rehabilitation of the Hospital.

It was also becoming apparent that as force of circumstances had made the Hospital Authorities repair the existing buildings there had developed a feeling that the plan now under consideration should be re-examined to see if it were not possible to secure modifications which would allow the retention of Guy's House. Without giving too detailed an account of the negotiations and discussions, it is impossible to produce these notes in strict chronological order. For example, at the same time as the discussions with the Ministry of Health and the London County Council were taking place on the scheme last referred to, members of the Medical Staff and members of the Court were making suggestions that the whole position might be re-examined and, in fact, various contradictory proposals were being examined simultaneously.

With the passing of the National Health Service Act it had become apparent that the old Court of Governors could do nothing further as the London County Council stated they were unable to give a decision with regard to the proposals and had referred the matter to the Ministry of Health, who, in turn, stated that nothing could be done until the Health Service came into being and the position was known.

The changes necessitated by the Health Service kept all concerned active on other matters for a short period and, although in October, 1947, the King's Fund sub-committee reported that they very much appreciated what they had seen of the rebuilding programme and were impressed with the magnitude of the scheme and the proposed layout, there was little, if any, progress made from then until the proposals were re-examined by the new Board of Governors at its second meeting on 26th July, 1948. The new Board were told of the work of the old Court of Governors and of the post-war Planning Committee and it was agreed that, in order that negotiations could be pursued, the plans should be approved in principle and the representatives of the Hospital authorised to continue negotiations with the London County Council and the Ministry of Health.

In September, 1949, a letter was received from the Ministry of Health, stating that it would be necessary to limit the Hospital to a maximum number of 800 beds instead of 1,000 as originally planned and that the design should be re-examined in the light of this information.

At this time, the Board felt that it might be in the interests of the Hospital if a second opinion were obtained and, in view of the many major hospital building programmes under way in the United States of America as compared with the almost complete standstill of all major hospital building in this country during the past ten years, it was decided to invite Mr. Paul G. Burt of Messrs. Fugard, Burt, Wilkinson & Orth, Architects of Chicago (the designers of the Wesley Memorial Hospital, Chicago), to act as Honorary Consulting Architects in connection with the rebuilding scheme. Mr. Burt accepted the invitation, documents and reports were sent to him and in May, 1950, he came to London and spent some eight weeks of intensive work in connection with the rebuilding proposals.

As a result of Mr. Burt's suggestions and discussions with Mr. Hall, the design already adopted was re-cast and, while retaining essentially the same pattern, it was contracted in size so that it could be erected on the vacant site to the east of Great Maze Pond without, as in the case of the original design, the erection of the four ward wings on the west side necessarily involving the demolition of Guy's House and Hunt's House. This proposal is set out in Illustration No. 7 and the two ward wings double-hatched show the first section it is proposed to build.

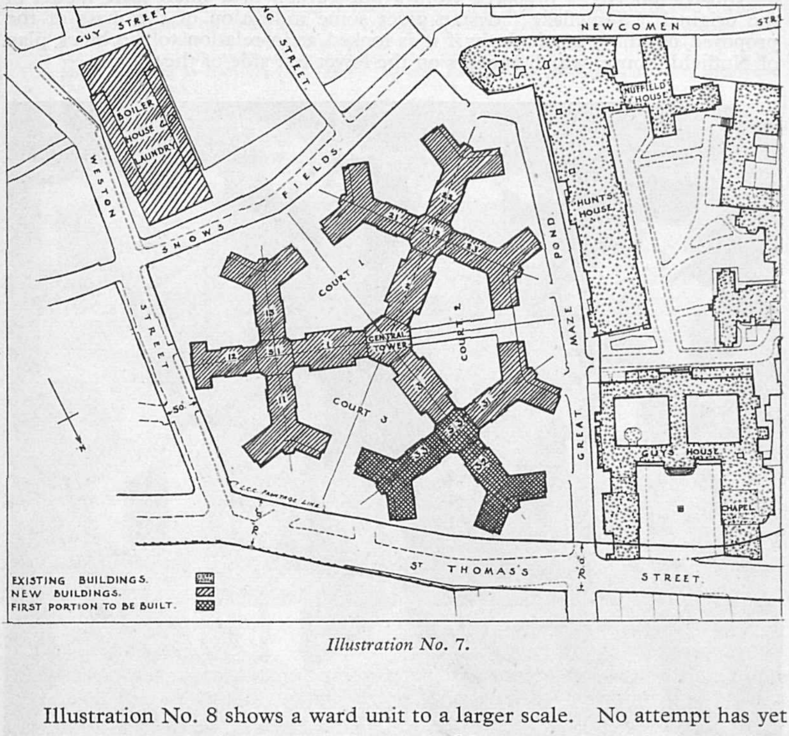

GUY STREET
NEWCOMEN STREET
STREET
BOILER HOUSE & LAUNDRY
WESTON STREET
SNOWS FIELDS
NUFFIELD HOUSE
HUNTS HOUSE
GREAT MAZE POND
COURT 1
COURT 2
COURT 3
CENTRAL TOWER
22
21
S2
23
2
13
12
S1
1
11
3
31
S3
33
32
GUY'S HOUSE
CHAPEL
L.C.C. FRONTAGE LINE
50'
70'0"
ST THOMAS'S STREET
EXISTING BUILDINGS.
NEW BUILDINGS.
FIRST PORTION TO BE BUILT.

Illustration No. 7.

Illustration No. 8 shows a ward unit to a larger scale. No attempt has yet been made to settle the detailed allocation of floor space but this sketch illustrates the general lay-out of all ward wings, balconies and fire escapes and particularly the ease of access from the service tower.

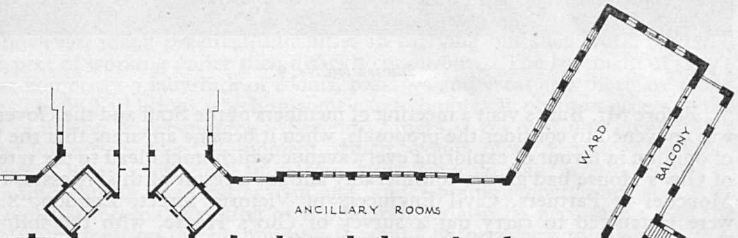

WARD
BALCONY
ANCILLARY ROOMS
STAIRCASE & LIFTS
CORRIDOR
ESCAPE STAIRS
ANCILLARY ROOMS
WARD
BALCONY
A WARD UNIT

Illustration No. 8.

Illustration No. 9 prepared from a photograph of a small scale model of the original " Snowflake " design gives some indication of the mass of the proposed building, particularly if it is looked at in relation to the block plan of Nuffield House, which appears on the lower left side of the picture.

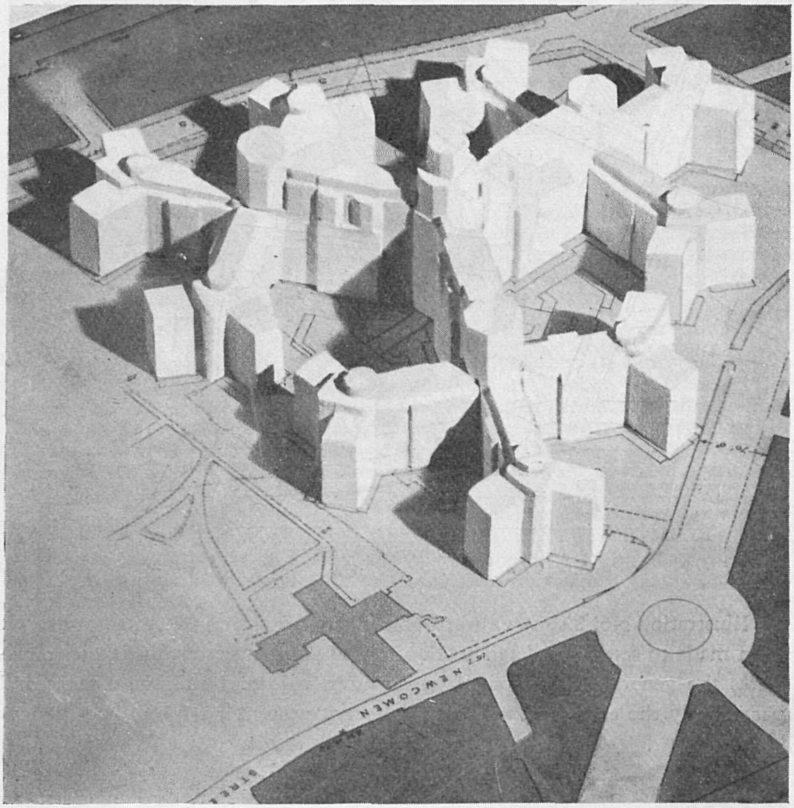


Illustration No. 9.

Before Mr. Burt's visit a meeting of members of the Staff and the Governors was convened to consider the proposals, when it became apparent that the body of opinion in favour of exploring every avenue which might lead to the retenion of Guy's House had grown considerably and, as a result of this, Messrs. L. G. Mouchel & Partners, Civil Engineers of Victoria Street, London, S.W.1, were instructed to carry out a survey of Guy's House, with the following Terms of Reference :—

> To consider and report on the feasibility of preserving and, where necessary, rebuilding Guy's House so as to provide accommodation for in-patients as at present, or, alternatively, for use as administrative offices, a college for resident medical staff or for a Dental School; and, if in your opinion, it is feasible to preserve Guy's House for any of these purposes, to report on the probable cost of such restoration and adaptation and whether or not in your opinion such cost would be disproportionate to the accommodation obtained.

Messrs. Mouchel's report was available at the time of Mr. Burt's visit and possibly influenced him in his recommendations and suggested alterations to the design. The principal items in Messrs. Mouchel's report are as follows :—

> The original foundations of Guy's House consisted of timber piles. From our own inspection it appears that these piles have completely rotted away. The walls have been under-pinned in brick but the under-pinning is of width similar to the walls, there being no practical increase in width to spread the load and no concrete or masonry base. The appearance of the under-pinning is very rough and the workmanship of poor standard.

> It was only taken down approximately 4 ft. 6 ins. and rests on a single layer of tiles laid direct on the earth. The mortar to the under-pinning is in very poor condition, obviously affected by moisture and is so soft and sandy that it can be removed by hand. It is obvious that the under-pinning is completely inadequate and failure and settlement could result at any time as the load-carrying capacity of the ground at the depth of the under-pinning is insufficient to carry the load even if the footings had been wider and the load spread.

Illustration No. 10 shows cracks in the foundations and the poor quality of the brickwork as well as the inadequate width of the footings. This picture was obtained when a part of the foundations was exposed for examination.

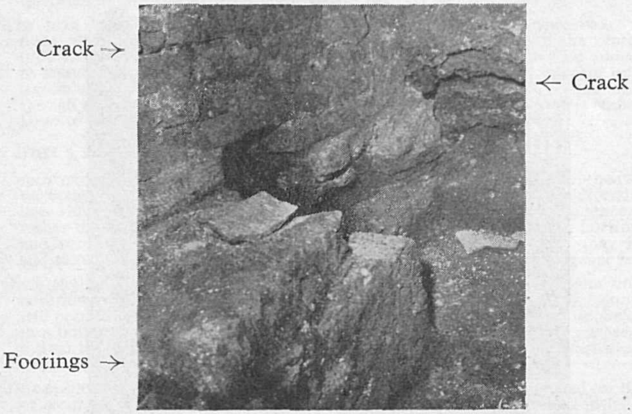


Illustration No. 10.

The variable nature of the soil accounts to some extent for the fact that settlement has occurred in some parts whereas in other positions it is not yet obvious. There are also many very obvious signs of failure in the walls—cracking, bowing and bulging—and the foundation settlement would account for part of the wall failure although in certain cases the failure may be due to the disintegration of the materials, possibly within the bulk of the wall as it is not always apparent on the face where there have been continual repairs and repointing.

Technically and structurally it would be possible to design new foundations which would safely support the loads if taken out at sufficient depth. There are, however, many practical difficulties in carrying out such work. Firstly, the aspect of working under such difficult conditions. The basement of Guy's House comprises a labyrinth of rooms, passages and areas and there are many extensions and additions which in some cases completely obstruct access to the parts requiring under-pinning. Secondly, there is the vast and complicated system of services and equipment which would often require alteration, temporary by-passing, etc. In certain cases, external walls would require to be shored during the cutting-out and under-pinning operations and it is possible that internal strutting of the floors may also be necessary. For the complete restoration of the building it would be necessary to allow all new under-pinning to all load-bearing walls, even those with no apparent settlement and in most places the old under-pinning would have to be cut out and removed.

Although the work is technically possible, the assessment of the economics is a difficult matter. To measure wall deflections and decide how much must be cut out and rebuilt and probably also the introduction of fire-proof floors throughout entails almost a complete rebuilding of the structure.

Messrs. Mouchel's report concludes with the following remark :—

> " It is our opinion that any decorations or minor local repairs would be entirely uneconomic and may result in completely abortive expenditure. From our investigation it would seem possible that further settlement and failure could take place at any time which might endanger certain parts of the building and from the condition of the under-pinning it would appear that further deterioration may be accelerated. Whilst the building is in use, however, it is obvious that certain structural repairs will have to be continually carried out."

The Consulting Engineer to the Hospital has recommended that as a matter of urgency external strutting of Guy's House at the south-east and south-west corners must be carried out in the near future if further dangerous settlement is to be avoided. Such strutting will only provide temporary relief and obviate the danger of an early collapse ; it will not in itself indefinitely prolong the life of Guy's House. Illustration No. 11 shows the proposals for the corner of Guy's House nearest the War Memorial gate.

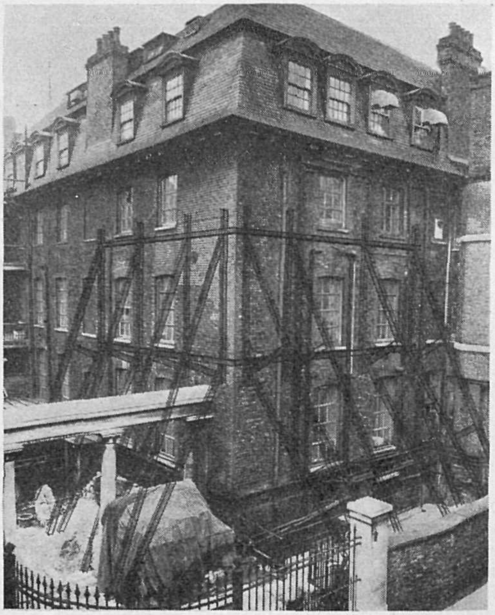


Illustration No. 11.

Mr. Paul G. Burt made a close study of the records of the Planning Committee and discussed the Hospital and School's needs and problems with many of the Governors and Staff and based his final conclusion, previously referred to, on the following arguments :—

> That the adoption of the modified plan for a hospital of snowflake design limited to the area east of Great Maze Pond meant that no immediate decision is required on the retention or non-retention of any existing building, nor would commencement of work on the new building entail any loss of present space. The proposed plan is capable of being built in units—a great advantage. It does not entail the necessity for demolishing existing buildings and it is, therefore, only necessary to ensure that the plan can provide the accommodation facilities required.

In Mr. Burt's opinion the plan does in fact meet all the demands, the reduction in over-all size being achieved by the elimination of some over-elaborate provision of space in ward units and ancillary ward services provided for on a scale in excess of the generally accepted international standards.

The plan is recommended on the grounds that no alternative arrangement would equal it in the matter of providing a large number of units of space of a uniform twenty-five bed size (or fewer beds plus additional services) so arranged round vertical transportation as to reduce to the simplest the traffic between the many and diverse elements of a hospital-cum-teaching centre.

Mr. Burt summarises the advantages briefly as follows :—

(1) Grouping of three-bed units or wards around a vertical traffic artery—lifts, stairs, chutes, etc.—gives in effect separate hospitals of about 450–500 beds close to the optimum which can be serviced by such an artery.

(2) Each three-ward group on each floor is immediately adjacent to a treatment and/or teaching unit of the central three-pronged core of the building.

(3) There is a possibility of complete separation of teaching staff, student and technician travel from the trolley and stretcher traffic of the lifts and from the stairs used in patient service and by visitors. This teaching and professional traffic becomes in a multi-storey building, and particularly in a teaching hospital, a major item. By the use of the central tower exclusively for this purpose, no such traffic not used for actual patient contact need use the facilities in the towers serving the patient wings.

(4) Inspection of the plan shows excellent orientation for all wards and that all have a free outlook.

(5) Each unit of area, whether ward or clinical, is in effect at the end of the line. Except for teaching access through the central wings to patient wards, no area need become a traffic lane between other sections of the building, an obvious necessity in all quadrangle or straight line planning.

(6) The plan lends itself to sectionalised building. One, two or three-ward units per floor, attached to a service tower and the corresponding wing of the central core as indicated by need or resources may be constructed. Units may be added adjacent to standing structures with a minimum of disturbance to the existing building—or its occupants. Under budgetary restrictions, this is a major virtue of the plan, though the practical unit which can be built may be of a scale which is embarrassingly large to budget for.

Mr. Burt's main criticisms are :—

(1) Decentralisation of lift service into four units involves more lifts than would be necessary were they grouped together. This results from loss in diversification in use, since in most cases the number of lifts must be based on frequence of service rather than the carrying capacity of the equipment. The saving in horizontal travel and resulting time loss for personnel, material, equipment, etc., may justify the additional cost involved in providing the separate banks of vertical travel facilities.

(2) Once the entire pattern in plan has been constructed it is a complete unit and no additions will be possible except to the extent that London County Council rulings will permit low buildings in the courts. The Hospital would, therefore, be committed to a building which, converted to patient housing in the nine outer spokes, will have a final limit of 1,200 or 1,300 beds, with teaching and treatment facilities available in the central core.

(3) This point is architectural and may not be of great interest but is inserted for the purpose of record. When completed, the building will be a dominant mass in its own right without reference to your existing buildings and grounds. It is acceptably related as to entry. Insofar as it " faces " at all, it faces the park but it is not and, because of its size and height, no matter how planned, cannot be an extension of your present group.

There are one or two other comments in Mr. Burt's report of great interest where he views Guy's problem from the point of view of American practice. He comments particularly on what he terms the biggest single problem in hospital design, namely, direct and simple lines of communication—in other words, traffic. He feels that basically the plan offers the best solution to this problem and requires the minimum amount of man and woman power in carrying the service of the hospital to the patients. He expresses his admiration of the personal and intimate way in which the ward patient is cared for in Guy's and of the elimination of the attitude that the patient is just a number. He states that American nursing methods cannot do that, but goes on to say outside the entrance of the ward the personal attitude does not matter. Anyone can be one of a thousand others for whom linen, food, enema trays and sterile bandages must be provided and outside the door of the ward it is the problem of supply and transportation which has got to be organised, centralised where possible, dispersed where centralisation will not work.

The technical recommendations of Mr. Burt are many, chutes for dirty linen and laundry, central servicing for sterile dressings, etc., necessarily served by separate service lifts, incinerators on each floor, arrangements for the disposal of contaminated waste, etc. He also gave much valuable advice on the form of structure, method of partitioning, wall finishes, ceilings, acoustics and other comparable matters. In connection with lifts, he stressed the necessity for banking, i.e., having the lifts in groups rather than scatter them individually throughout the building—again a feature provided for in the existing plan.

In January, 1950, representatives of the Board had an interview with senior officers of the Ministry of Health to report the gravity of the structural position of the existing buildings and to ask for permission to commence building. Attention was drawn to the fact that Hunt's House was served by a temporary wooden staircase given an estimated maximum life of five to seven years. Beds in Guy's House were in a building condemned on many occasions but each time subsequently brought back to life, a building now known to be in a dangerous condition. The deputation was told that pressure on the building resources of the country was so great that it was improbable that any start could be made on the major rebuilding of Guy's Hospital for at least five years. Subsequent to the deputation's visit to the Ministry of Health, Messrs. Mouchel's report became available and the position at the present time is that further representations have been made to the Ministry of Health, stressing the gravity of the position of Guy's Hospital and its Medical School, the main facts being :—

Medical beds are accommodated in a building with a temporary wooden staircase and two old lifts—a building which would not be licensed for normal residential use of people who were ambulant but which yet has to accommodate *hundreds of people, the majority of whom could not get out of bed without* assistance.

Guy's House, accommodating the surgical beds, is in danger of collapse owing to the sinking of the foundations. Large cracks have appeared in the main walls in the south-west corner and other parts are several inches out of the perpendicular.

During the past twelve months there have been a number of fires, several of which have involved area calls to the Fire Brigade ; five have probably been due to faults in the electrical wiring. This is largely due to enemy action and the consequential effect of the weather on buildings partly without roofs and windows for several years.

Without any alternative ward accommodation, major reconstruction of either of these blocks is impossible and, in the event of one block having to be withdrawn from use owing to being unsafe, the position of the Hospital and School with only approximately 300 beds available would be grievous indeed ; while, if both blocks were no longer fit to be used, it is obvious that Guy's Hospital and its associated Medical School would, for a time at any rate, almost cease to exist.

The position has been fully explained to the Ministry of Health and to the University and, although at the time of writing a definite decision has not been made, it is hoped that as a result of representations made it will be possible to commence work on the building of the first instalment of the new Hospital within the relatively near future.

It will be apparent that the Governors and members of the Medical Staff concerned in this matter have taken infinite pains to secure the best advice and to consider the problem from all its angles. No plan can be perfection in the eyes of everyone and, in fact, it has been said that the perfect hospital designed to-day is out of date before work is commenced on its foundations.

In planning the development of Guy's, the intention has been to provide an over-all plan which can be built in sections over a long period and at the same time provide that each section shall be part of a co-ordinated whole. If carried through to completion it would, in the opinion not only of those who have been professionally engaged on the work but confirmed by the verbal remarks of many who have visited the Hospital from European countries and elsewhere, be one of the most outstanding hospitals in the world. The whole of the site would be some eighteen to twenty acres in extent ; on the east would be the main ward units, the south-west the buildings of the Medical and Dental School, on the west and north-west the residential quarters of the nursing and domestic staffs and to the north the administrative offices together with the quarters for the Resident Medical Staff. This latter is perhaps an assumption based on the hope that it will be possible to implement the further suggestion that Guy's House, when no longer used as wards, should provide on its ground floors the administrative offices and on its upper floors the appropriate residential quarters for the Medical Staff. This would achieve the end desired by all connected with Guy's, namely, the preservation for years to come of that ancient part of the Hospital built by Thomas Guy himself which has for so long been the home of Guy's men and a heritage that has done much to maintain and foster the traditions of the Hospital.

(The plans illustrating this Article were specially prepared for this purpose by Messrs. Young & Hall (Architects), Southampton Row, W.C.1).

Correspondence

Hospital Planning

SIR,—I was very interested in the article on modern hospital architecture by Dr. René Sand, particularly the paragraph on " rooms versus wards," because I believe that this decision goes to the root of hospital planning. I feel sure that the large ward must eventually go. I feel equally sure that Dr. Sand's detailed suggestions are based on an unusual psychology, or at any rate on a psychological study that has been made on other than British patients. He says, " If we order a single bedroom when we go to an hotel, we desire privacy even more when we feel ill." We order a single bedroom at an hotel because we are there for a night or two only, and in the day time we go about our business ; we should hate to live in one room by ourselves twenty-four hours a day for three weeks. When we are ill we desire privacy, but when we are better we long for company even more than we do when we are well, because there is so much to talk about in our recent adventures which others can share from their own experience. Dr. Sand proposes rooms with two beds. In my experience this is nearly always a failure, and is only better than a three-bedded room, an arrangement which is always disastrous. Four people always get on well ; they can swap stories, play bridge or canasta, do some community singing, or break into smaller groups if one is tired. Two people confined together get on well for the first day, by the end of the second they have heard each other's news and family gossip and are heartily sick of them, on the third day they study each other's peculiarities with increasing hostility, by the end of a week they detest each other with bitter loathing. In a group of three the sneers, innuendoes and cattery that one human being can inflict on another are made far worse by the two-against-one alliance that inevitably develops.

The plan at the Royal Masonic Hospital, where I have worked for fourteen years, has always seemed to me ideal in every way. There are no wards, but units of twenty-five beds under one sister. Each unit consists of nine single rooms and four four-bedded wards, so that everybody who is ill or has had an operation can have a room to himself, and the sister can arrange among those getting better four groups compatible in age, temperament and social background. In addition, each unit has a day room where the up-patients can entertain their friends.

For teaching, such an arrangement would be ideal. How much better it would be to be able to discuss an ill patient frankly with one's firm in his room, than to be forced to hush one's voice and hide one's meaning in paraphrases in order not to give away his secrets to the patients in the beds on each side, each of them agog for a juicy morsel to enliven the tedium of convalescence.

Yours, etc.,

HENEAGE OGILVIE.

12, Neville Court, N.W.8.

ESSAY COMPETITION

The Editors offer two prizes, one of £6 6*s*. and one of £3 3*s*. for an essay on one of the following subjects :—

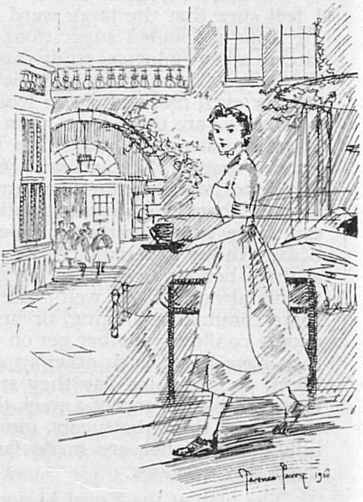
" Manners in medicine."
" The art of being ill."
" Ghosts."

The originality and literary style of competitors will be important considerations in the awarding of prizes.

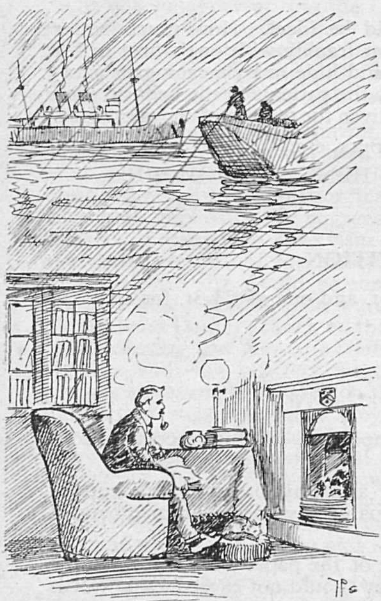
All *unqualified* Medical, Dental, Nursing and Physiotherapy Students of Guy's Hospital are eligible to compete. Qualified students or members of the *Gazette* Committee are barred.

Entries should be typewritten on one side of the paper and must be in the *Gazette* office before March, 31st, 1951. They should not exceed 1,200 words in length. The Editors' decision on all matters is final.

Nostalgia



Barrie once said of memory that God
Made it to bring us roses in December ;
But there are scenes as bright as any flower
That trooping come and urge me to remember.
These first and last :
The weathered stones of Guy's
That changeless seemed beneath the changing skies ;
The thunder of the traffic that made shiver
The Boro' High Street ; from across the river
The wail of some ship's siren plaintively
Carries to where, *with Osler on my knee*,
I burn the midnight oil ; upon the air
The scent of hops pervasive everywhere—
The long perspective of the Colonnade,
The Staff's arrival dignified and staid,
Tail-coated and top-hatted ; they appear
As giants, we as pygmies in their rear ;
The sparrows that out-shrilled the morning lark ;
The precious green oasis of the Park
That flowers to lilac when the nurses stream
In clusters *to and from the Home ;* the gleam
Of shaded lights at night ; *the silent tread*
Of nurse with her quick glance from bed to bed ;



The old Front Surgery ; the firm's Take-In ;
—some drunk's protesting, judging by the din !—
The lavish open house we used to keep
With midnight beer ; the few hours snatched for sleep—
Patients, a medley ; mostly of the stuff
And calibre of heroes—proof enough
That soon in Flanders England found them work,
And for their sons the testing at Dunkirk ;
Their gratitude :—" The pain ? It might be worse
I reckon . . . Thank yer doctor, thank yer nurse."

Old Hospital ! A legend in the making
Whose gifts were spread before us for the taking ;
Her spirit held within her bricks and mortar
Granting to every son and every daughter
Some essence of herself against the day
When each must pack his bag and slip away—
Envoi
That terse inscription graved indelibly
ET IN ARCADIA EGO speaks for me.

E.A.P.

RESIDENTS' PLAY

Because of the overwhelming demand for seats an extra performance of the Residents' Play, 1951, will be given on the evening of Saturday, 24th February. Application for tickets may still be made to the President of the Residents, The College, Guy's Hospital, until Tuesday, 6th February, 1951.

GOOD WISHES

Congratulations on her appointment, regret at her leaving Guy's and best wishes for the future to Sister Titley, the Assistant Matron, who is shortly to become Matron of St. Charles's Hospital, Ladbroke Grove.

A NEW JOURNAL

" Medical and Biological Illustration," a new quarterly journal published by the B.M.A., and " devoted to textual and pictorial discussion of illustration in medical and biological teaching, and to the development of medical and biological techniques," will appear for the first time this month. Unique of its kind, this publication owes its inception largely to the work of Mr. C. Engel of the Photographic Department at Guy's, while also on the Editorial Board are Dr. R. C. MacKeith, Miss Sylvia Treadgold and Professor J. Whillis.

ACADEMIC

January		
29th	12.00.	Mr. K. Hooper. Dental Clinical Lecture. " Some Popular Dental Fallacies." Dental Theatre.
	1.00.	Dr. Munro. Clinical Lecture. " The Unwanted Pregnancy."
February		
		Exhibition. Surgical Department. " The Surgical Treatment of Pain."
1st	1.00.	Dr. Cameron. Clinical Lecture. " A History of Medicine "—*contd.*
	4.30.	X-Ray Meeting. Gordon Museum.
2nd	2.15.	Medical Department. Combined Round. Preclinical Classroom.
5th	12.00.	Mr. A. R. F. Thompson. Clinical Lecture. " Management of the Third Molar." Dental Theatre.
	1.00.	Dr. McConnell. Clinical Lecture. " Dental Anæsthesia " (illustrated by films).
6th	1.00.	Dr. Baker. Clinical Lecture. " Rheumatic Fever."
8th	4.30.	X-Ray Meeting. Gordon Museum.
9th	1.00.	Dr. Kauntze. Clinical Lecture. " The Bowels."
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
10th	10.00.	Mr. McNeill Love, Royal Northern Hospital. Surgical Departmental Round. Clinical Theatre.
12th	1.00.	Mr. Atkins. Clinical Lecture. " Recent Advances in the Treatment of Carcinoma of the Breast."

SPORT

3rd	Rugby 1st XV. *v.* Coventry. (Coventry.)
	Rugby "A" XV. *v.* Charing Cross and Royal Dental. (H.O.P.)
10th	ENGLAND *v.* IRELAND. (DUBLIN.)

MEDICAL FILMS

On Tuesday, January 30th, at 8.15 p.m., " The Centre International du Film Medical " will present a number of French medical films at The Institut Francais, 15, Queensberry Place, London, S.W.7. Admission will be free *and by ticket only* obtainable from Monsieur Saffas, Intendent, Institut Français, du Royaume-Uni, at the above address.

GAZETTE SUBSCRIPTIONS

We would also remind our readers that the annual subscription to *The Gazette*, 12*s*. 6*d*. per annum, post free, including the " Directory of Guy's Men (Medical and Dental)," as and when published, is now due and, if not already paid, should be forwarded to the Manager, The Gazette Office, Guy's Hospital, S.E.1.

Guy' Hospital War Memorial

It is proposed to place the names of the following Guy's men and students who gave their lives in the 1939–45 War on the War Memorial in the College Dining Room.

These names, together with those of the Guy's Nurses and Technical Staff who gave their lives, will also be carved on the Hospital War Memorial.

If anyone reading this notice knows that a name has been omitted from the list or can send further details about the circumstances in which the Guy's men or women lost their lives on Active Service or by Enemy Action, I should be grateful if he would write to me.

E. R. BOLAND,
Dean.

BROWNING, S. B.	Major, R.A.M.C.	Died 1946.
BUNN, H. W.	—	Lost at sea, 1942.
CARRUTHERS, A. S.	Lieut., R.A.M.C.	Died as result of wounds in India, 1945.
CHAUNDY, C. A.	Capt., A.D. Corps	Killed in action in Western Europe, 1945.
CHEESMAN, A. E. P.	Surg. Capt., R.N.	Killed, 1942.
CLARKE, R. G. H.	Corporal, R.A.F.	Killed, 1943.
COCKING, A. W.	Surg. Commander, R.N.	Died at Barrow Gurney Naval Hospital, 1944.
CRONE, J. S.	Temp. Surg. Lieut., R.N.V.R.	Lost at sea, serving on H.M. Submarine " Sterlet," 1940.
CROSS, M. C.	Surg. Lieut., R.N.V.R.	Missing, presumed killed, in H.M. Minesweeper " Clacton ", 1944.
CROUDACE, H. T.	Capt., S.A.M.C.	Killed in action at Battle of Sidi Rezergh in Egypt while serving with 11th Field Ambulance, 1941.
CUTHBERTSON, P. S.	Surg. Lieut., R.N.V.R.	Reported missing in action in October, 1943, and presumed killed in November, 1944.
CUTTS, G. L.	*Surg. Lieut., R.N.V.R.*	*Died following an operation, 1940.*
DOYLE, J. T.	Capt., R.A.M.C.	Killed in action in N.W. Europe, 1944.
DRURY, J. W.	Surg. Lieut. (D), R.N.V.R.	Died on active service at Colombo, 1945.
EDWARDS, R.	Major, R.A.M.C.	Missing at sea, November, 1943.
EGAN, C. H.	Surg. Lieut. Cmdr., R.N.	Reported missing from H.M.S. " Glorious " presumed dead.
FARARA, A. E.	Capt., A.D. Corps	Died, 1941.
FORD, W. C. G.	Surg. Cmdr. (D), R.N.	Died as the result of an accident, 12th February, 1945.
FROST, R. L.	Major, I.M.S.	Died, 1942.
GATERELL, J. J.	Lieut., A.D. Corps	Died, 1940.
GIBSON, C. G. G.	Lieut. Col., R.A.M.C.	Died on active service, April, 1942.
GRAHAM, L. A. J.	Col., R.A.M.C.	Died on active service, 24th March, 1944.
GREENE, A. C.	Major, I.M.S.	Died in India, 1945.
GREENFIELD, R. L.	Surg. Lieut., R.N.	Reported killed on active service, 1942.
GREENWOOD, K. H.	Capt., R.A.M.C.	Died at Cairo Base Hospital, 1943.
HANKEY, S. D.	—	Died of Typhus at Tali in Western Yunnan, 1944.
HARRIS, K.	Capt., R.A.M.C.	Lost at sea in S.S. Erasmic, 1942.
HARTE, L. P.	Capt., A.D. Corps	Died on active service in April, 1941, through enemy action at sea in evacuation from Greece.
HAYES, F. M.	Surg. Lieut., R.N.V.R.	Reported missing, believed killed, 1942.
HAYWARD, F. R.	Capt., R.A.M.C.	Died, 19th May, 1941.
HILL, A. E.	Lieut,. R.A.M.C.	Died, Military Hospital in England.
HINDE, E. J. F.	Capt., R.A.M.C.	Reported missing at sea, presumed dead, 1941.
KNIGHT, H. M. R.	Capt. (temp. Major), R.A.M.C.	Killed in action, 1942.
LAMONT, G. R.	Lieut, A.D. Corps	Died suddenly, 1st August, 1940.
LEE, A. S.	Flying Officer, R.A.F.V.R.	Reported killed in flying accident, 1941.
LINTOTT, G. A. M.	Major, R.A.M.C.	Died whilst serving in Egypt, 1942.

LOCKE, A. E.	Capt., R.A.M.C.	Died, 1943.
LURIE, D.	Col., S.A.M.F.	Killed in motor accident in Egypt, 1942.
MACRAE-GIBSON, A. C.	Surg. Lieut., R.N.V.R.	Died as the result of an accident abroad, August, 1945.
MALT, D. F.	Capt., A.D. Corps	Died, 1945.
MERRILL, L.	Surg. Lieut. Cmdr., R.N.	Reported missing on active service; later reported killed, 1944.
MITCHELL, T. E.	Capt., R.A.M.C.	Died on active service at Birmingham, 1941.
MORRIS, H. C.	Lieut., No. 9 Commandos	Killed in action whilst serving at Lake Commachio, Italy, 1945.
MULLINS, M. R.	Capt., S.A.M.C.	Died in Italy, 1945.
MURDOCH, J. B. C.	Capt., R.A.M.C.	Died on active service, April, 1944.
NEEDHAM, E. J. A.	Capt., R.A.M.C.	Reported missing, and later officially presumed lost at sea, 1943.
NEWBERY, D. A.	Surg. Cmdr., R.N.	Reported missing; later reported killed serving on H.M.S. "Repulse," 1941.
OLIVER, J. W.	Surg. Lieut.-Cmdr., R.N.	Lost at sea whilst serving in H.M.S. "Bonaventure," 1941.
OUTFIN, R. M.	Wing-Cmdr., R.A.F.	Killed on active service, 1944.
PATTERSON, J.	Surg. Lieut.-Cmdr., R.N.V.R.	Died, 1944.
PEACOCK, J. E. G.	Surg. Lieut. (D), R.N.V.R.	Drowned at sea in action whilst serving on H.M.S. "Hood," 1941.
PECK, C. W.	Capt., R.A.M.C.	Killed in action on active service, 1942.
PITT-PAYNE, W. S.	Flt.-Lieut., R.A.F.V.R.	Died on active service, 1943.
PLUMPTRE, C. M.	Lieut.-Col., I.M.S.	Died, 1942.
POWELL, A. C.	Lieut., R.N.V.R.	Killed when aircraft crashed into sea, 1944.
REID, A.	Civilian doctor	Killed in Far East, 1942.
REYNOLDS, W. L. E.	Lieut.-Col., R.A.M.C.	Drowned at sea by enemy action, 1939.
RHYS, J. W.	Surg.-Lieut., R.N.	Presumed to have been lost at sea when H.M.S. "Glowworm" was sunk, 1940.
ROONEY, J. J. F.	Lieut.-Col., I.M.S.	Died, April, 1941.
ROSENBERG, D.	Capt., R.A.M.C.	Died 14th October, 1946, from typhus.
ROSEVEARE, E. R.	Surg.-Lieut., R.N.V.R.	Died in a sanatorium, 1944.
SALSBURY, A. F.	Lieut.-Col., A.D. Corps	Died, 25th November, 1944.
SHARPE, R. M.	Capt., R.A.M.C.	Reported missing at sea, 1943.
SIMPSON-SMITH, A.	Lieut.-Col., R.A.M.C.	Reported (unofficially) prisoner of war in Italy and shot while attempting to escape. Reported buried in Halfayo-Sollum War Cemetery, 1944.
SOUTH, R.	Merchant Navy	Lost at sea when ship torpedoed, 1943.
SPOUSE, E. A.	Surg.-Lieut., R.N.V.R.	Lost at sea; presumed killed.
STAINTON, P. G.	Surg.-Lieut., R.N.	Killed in motor accident at Cape Town, 1940.
STEBBINGS, H. P.	Lieut., R.A.	Killed in action in Middle East, 1941.
TODD, T. F.	Major, R.A.M.C.	Killed in motor accident on active service, 1939.
VENNING, H. D.	Lieut., R.A.M.C.	Killed in action in Middle East, 1942.
WALMSLEY, E. S.	Capt., General List	Killed in action near Paris, 1944.
WARR, V. C.	Capt., A.D. Corps	Died of wounds received in action, 1940.
WESTON, F. H. J.	Surg.-Lieut., R.N.V.R.	Lost his life on H.M.S. "Rawalpindi" in action against the German pocket battleship "Deutschland."
WESTON, W. F. J.	Lieut., R.A.M.C.	Missing in Malaya. Later reported died in Singapore, 1943.
WETHERELL, S.	Flt.-Lieut., R.A.F.V.R.	Killed by enemy action in Burma, 1945.
WHATLEY, J.	L/Cpl., Oxfordshire and Bucks Light Infantry (Commando)	Killed in action, Dieppe Raid, 1942.
WILLIAMS, J. N.	Sqdr.-Ldr., R.A.F.V.R.	Died, 1945.
YARDLEY, G. E.	Capt., R.A.M.C.	Died of wounds in Italy, 1944.
YOUNG, W. E.	Capt., R.A.M.C.	Killed in action in Libya, 1942.

Sport

HOCKEY

PAST *v.* PRESENT

At H.O.P. Result :— Past 1—Present 12
10th January, 1951

I am tired ; I am stiff all over and ache in every limb. I have just played in a hockey match in which my side lost by twelve goals to one, a resounding defeat. My head aches as a result of the alcohol consumed after the match. By all rights I should be bad tempered and disgruntled, but this is far from the case. For although physically January 10th is a day to forget, mentally it is a day to be long remembered.

It was after the war, when the hockey dinner was revived, that the decision to invite old members of the Club was made. This was soon followed, largely at the instigation of the present captain, E. A. Murray, by a Past *v.* Present match, to be played of course at H.O.P. This year for the first time the Past had eleven players all of whom had played for the club at some time or other in the previous years, and next year there will clearly have to be a selection committee. What was at first a bold idea has now become reality, and the Past who up till now have been hard put to raise a team, can concentrate on improving the standard.

The match itself was played in drizzling rain. The pitch was slow, and the wind was easterly. A poor prognosis if ever there was one. The score suggests that the game was a fiasco, but such was not actually the case. Mind you it would take a Neville Cardus amongst critics to give the impression that the two sides were nicely balanced, but although the Past were outclassed, they were never overwhelmed, and there was life in the game to the very end. The match was a friendly one, a very friendly one, and it would be invidious to criticise too harshly. The Present won largely because their forwards were unmarked, and so had complete freedom to manœuvre where they wished. Furthermore, their shooting was of a high standard, one goal from the right wing being outstanding. Their captain was as ubiquitous as ever, but chief credit must go to Bud Opie, inside right, who scored a quite indecent number of goals ; five, six, or seven, I cannot remember exactly how many.

The Past won a most successful penalty bully, and for the record the score then stood at one all. After that the rot set in, and a vintage side was sadly defeated, notwithstanding the noble efforts of Dimock and Martin. Of course if our captain had not had 'flu . . . .

The game was followed by a dinner in the Miller, marred only by the regrettable absence, through illness, of Dr. Marston and Mr. Morgan. Their absence, however, was patrially atoned for by the presence of a representative selection of the club, both past and present. But what a pity that we could not drink the health of the Club out of the Hockey Cup. This we hope to do next year, and it was on that note, wishing the Club all luck in the cup, that a most successful dinner came to a reluctant close.

Teams :—

Past : J. Ojukwu ; J. R. Dimock, G. Hammond ; R. C. Hill, R. A. Keable-Elliott, P. C. Grummitt ; R. D. Emslie, J. R. Burt, E. Martin, J. B. Franklin, K. Y. Khong.

Present : C. H. Bishop ; G. H. Danford, D. Linahan ; R. Sandfield, E. A. Murray, C. Robinson ; R. Hodson, C. H. Opie, S. R. Earl, G. Lyne, D. Duckworth.

Hospitals' Cup, 2nd Round

Guy's *v.* Westminster

At H.O.P. Result :— Won 4—2
17th January, 1951

Unlike most cup matches this was a very enjoyable game. The outcome of the contest could not be forecast at any stage of the game. Guy's had to play hard for their victory, indeed from the play during the first half it seemed that Westminster would be the victors. After the first quarter of an hour the play became more open and Guy's held the advantage. Opie scored two goals for Guy's before the interval. After the interval Westminster opened the scoring, thereafter goals were scored alternately by each side. Opie scored three and Earl one of Guy's goals.

Team : C. H. Bishop ; G. H. Danford, R. Park ; C. Robinson, E. A. Murray, R. Sandfield ; D. Duckworth, P. Cook, S. Earl, C. H. Opie, R. Hodson.

ASSOCIATION FOOTBALL

2nd Round, Inter-Hospitals Cup

Guy's *v.* Middlesex

At H.O.P. Result—Won 4—0
10th January, 1951

Team : M. Lyon ; M. Bishop, J. Wylie ; D. Lipington, P. Southgate, D. Matthews ; A. Fearn, B. Cornhill, K. Watmore, C. Leckie, D. Oldfield.

Southern Amateur League

Guy's *v.* Old Stationers

At H.O.P. Result—Draw 2—2
20th January, 1951

As is usual when these two sides meet the result was a draw. Play opened with Old Stationers quickly to the attack, which was sustained for the first ten minutes, at the end of which the visitors opened their account.

This goal seemed to put some purpose into the Hospital side and a strong shot by the left-half was deflected by a Stationers' defender into the net but the referee refused to allow a goal as he adjudged Oldfield to be standing off-side.

However, not to be outdone by this stroke of misfortune, Guy's quickly equalised through Leckie. The inside-left secured the ball outside the penalty area, pushed it forward a yard and hit it superbly, hard and low, to the goalie's left—a perfect goal.

Guy's pressed harder still now and before half-time gained the lead. Watmore, though harrassed by two defenders, placed the ball in the net.

In the second half play was again even and the visitors equalised. After this there were many escapes for both sides, perhaps the nearest from Guy's point of view of winning was when Crabtree went up to head a centre home and his effort was very luckily stopped by the Stationers' goalkeeper, the ball hitting his outstretched arm quite accidentally as far as he was concerned. Just before the end Lyon saved two very dangerous corners in fine style. The outstanding players on the Guy's side were Lyons, Bishop and Southgate. The whole defence, although occasionally out of position, played with determination. The forwards though seemed to lack a general and did not play as a coherent unit.

Team : M. Lyon ; M. Bishop, J. Wylie ; D. Matthews, P. Southgate, P. Shea ; A. Fearn, N. Crabtree, K. Watmore, C. Leckie, D. Oldfield.

SAILING CLUB

At the Annual General Meeting held on January 12th, the following Officers were elected for 1951 :—

Commodore : Sir Heneage Ogilvie.
Vice-Commodore : Mr. Hedley Atkins.
Secretary : D. B. Longmore.
Treasurer : M. D. Awty.
Committee : K. Wilderspin.
K. Kelly.

The results of the Inter-Hospital racing for the Bannister Cup last season were :—

1. London.
2. Guy's
3. Middlesex.
4. St. Mary's.
5. Royal Free.
6. Royal Dental
7. St. Thomas's.
   King's College Hospital.
9. University College Hospital.
10. St. Bart's.
11. Charing Cross.

The Annual Dinner of the Guy's Hospital Sailing Club will be held on Friday, February 16th, at 7.0 p.m., in the Spit.

Will those who wish to attend please sign the list in the Colonnade.

RUGBY FOOTBALL

Guy's *v.* Wasps

At Sudbury. Result—Lost 0—16

13th January, 1951

In this game Guy's played with a depleted side owing to injuries, and although under the circumstances they did jolly well to hold the Wasps to 16 pts., the side is still lacking in " fire " and " fitness."

At half-time the Hospital were only 5 pts. down and this was due to some good hooking by Clark who got the ball back 9 scrums out of 10. In the loose the forwards just about held their own with Pook, Bellis and Clark prominent.

After the change round the Wasps started throwing the ball about and as a result exposed the Hospital's most glaring weakness—bad tackling. Every score by the Wasps was the result of bad defensive play, and unless this is tightened up a lot more points are going to be scored against the Hospital this season.

Team : D. A. Rees ; B. Dodson, T. Smith, J. Osborne, G. Thomas ; N. Balfour-Lynn, G. Beresford ; J. Hobbs, D. Clark, C. T. H. Wilson, K. Wilkinson, C. Pook, W. G. Davies, B. Gunnadine, T. G. N. Bellis.

Reviews

A Short Textbook of Surgery. By C. F. W. ILLINGWORTH. 5th Edition, 1950. Churchill. *Price* 30*s.*

No text-book of surgery can be completely comprehensive ; even the encyclopædic works must fail in various minor respects. The undergraduate student, moreover, frequently has no eventual surgical aspirations. What is needed, therefore, is a manual which provides the main principles of the subject within small compass and in readable form. The work under review ably fulfills these specifications. Granted, professional and detailed criticism can be levelled at almost every section by those so minded. For all that, this text-book does cover the field and the principal features of diagnosis and treatment are included, and the whole is presented in succinct and acceptable manner.

G.

Pain and its Problems. Edited by SIR H. OGILVIE & W. A. R. THOMSON. Eyre and Spottiswoode—for The Practitioner. *Price 12s. 6d.*

This is a collection of eighteen articles written by clinicians and physiologists and covering many theoretical and practical aspects of the problems of pain. The articles are authoritative but they do not possess nor do they claim any originality of thought ; they provide brief resumées of the views of investigators on the mechanisms of pain and of practical methods for dealing with it in various branches of clinical medicine. As such they will be helpful to those who have not been able to keep in touch with current work on the subject but it is doubtful whether they add very much to the knowledge of an experienced clinician. In many cases the phraseology is very loose, *e.g.*, *pain* signals are discussed as operating at spinal cord level or the peritoneum is described as being supplied with *sensation*, thus ignoring the necessity for central appreciation at conscious levels. In a large number of papers there is found a well developed tendency towards teleological thought; the *purpose* of pain is quoted as a heading and considerable confusion arises as between the usefulness of the reaction based upon painful experience and the cause of that experience. The words of John Hilton on " pain as a monitor " and as " a starting point for contemplation " should be remembered.

W.S.

Hospital Information, etc.

APPOINTMENTS VACANT

Required. **Resident Medical Officer** (male) in **Nuffield House** (Private Block), duties to commence March 1st, 1951. Grading Junior Hospital Medical Officer, commencing salary £700 p.a. Appointment for six months in the first instance.

Applications with copies of testimonials should be lodged with the Superintendent, Guy's Hospital, London Bridge, S.E.1, on or before **February 12th, 1951.**

YORK CLINIC FOR PSYCHOLOGICAL MEDICINE

Required, **Resident House Physicians** (male), two vacancies, one to commence on 1st March, 1951, and one on 1st April, 1951. The posts offer good opportunities for post-graduate study. Salary in accordance with the terms and conditions of service for House Officers in the National Health Service. Appointment for six months in the first instance and may be renewed for further such periods.

Applications with copies of two testimonials should be sent to the Superintendent, Guy's Hospital, London Bridge, S.E.1, on or before **February 12th, 1951.**

CLUBS' UNION COUNCIL

Award of Blues

At the last meeting of the Clubs' Union Council approval was given to the following recommendations submitted by the Blues' Committee :—

	Full Blue	*Half Blue*
Athletic Club :		
	—	J. V. V. Lewis.
	—	E. O. James.
	—	C. Pook.
Cricket Club :		
	A. E. Jones.	D. M. E. Allan.
	K. W. Gray.	W. J. Howells.
	P. L. Pickett.	H. Bissoon Dath.
	D. M. Lipington.	N. R. Cooke.
Rifle Club :		
	—	D. E. G. Thomas.
Rugby Club :		
	J. M. Hobbs.	T. G. L. Bellis.
	J. Robinson.	W. J. Howells.
	W. G. Davies.	E. W. G. Birch.
	—	A. V. Large.
	—	C. Pook.
	—	C. T. M. Wilson.
	—	S. E. Knipe.
	—	J. F. Pritchard.
	—	B. Middle.
	—	D. Clarke.
	—	W. S. Lund.
Sailing Club :		
	J. W. Bradbeer.	D. B. Longmore.
Tennis Club :		
	D. V. Duckworth.	N. E. Price.
	F. A. F. Biddle.	N. Brookes.
	—	G. B. C. Jones.

PAPERS BY GUY'S MEN

Pringle, K. Modern Trends in Orthodontic Treatment in Children. *Med. Pr.*, 1950, **224,** 81.

Rees, R. J. W. and Robson, J. M. Experimental Tuberculous Infections of the Cornea of the Mouse : A Screening Test for Anti-Tuberculous Substances. *Brit. J. Pharmacol.*, 1950, **5,** 77.

Reinhold, J. D. L. and another. The Relationship of Idiopathic Cardiac Hypertrophy to Foetal Endocarditis. *Arch. Dis. Childh.*, 1950, **25,** 170.

PASS LIST

CONJOINT BOARD

December, *1950*

Physics

N. R. Cooke
M. R. Davison
A. R. Grice
R. B. Johns
R. F. King
R. C. Moyse
M. F. H. Willis

Elementary Biology

M. R. Davison
R. B. Johns
R. F. King

UNIVERSITY OF OXFORD

Michaelmas Term, 1950

Medicine, Surgery and Midwifery

D. J. Muller

CHANGES OF ADDRESS

R. E. Horton, F.R.C.S., " Morcote," 36, Elmlea Avenue, Westbury-on-Trym, Bristol. Tel. : Westbury-on-Trym 67389.

G. MacVicar, M.R.C.S., L.R.C.P., Wern Fechan, Beulah Road, Rhiwbina, Cardiff. Tel. : Llanishen 70.

Capt. G. A. K. Missen, R.A.M.C., 29, British General Hospital, British Army Post Office No. 5.

J. D. Trethowan, F.R.C.S., " Redmayes," Oakwood Close, Chislehurst, Kent. Tel. : Imperial 1218.

BIRTHS

BULSTRODE.—On January 5th, 1951, at Hartwell House, Hartfield, Sussex, to Jacqueline, wife of John C. Bulstrode, M.R.C.S., L.R.C.P.—a son (Christopher).

CRABB.—On January 8th, 1951, at St. Brenda's Nursing Home, Bristol, to Isobel (neé Buchan), wife of H. S. Malcolm Crabb, B.D.S.—a daughter (Angela Mary).

GRUMMITT.—On December 14th, 1950, at St. Mary's, Manchester, to Dorothy (née Howe), wife of M. W. J. Grummitt, M.B., B.S.—a daughter (Isobel Mary).

HUMPHREYS.—On December 27th, 1950, at Crickhowell, Brecs., to Norah (née Beckett), wife of R. C. Humphreys, M.B., D.R.C.O.G. —a daughter (Hilary Lynn).

MAILE.—On January 1st, 1951, at Nuffield House, Guy's Hospital, to Sheila (née Kelly), wife of W. B. D. Maile, M.D., M.R.C.P.—a son (Christopher James Drayson).

MERRYWEATHER.—On January 7th, 1951, at the Royal Devon and Exeter Hospital, to Patsy (née Munkley), wife of Reginald Merryweather, F.R.C.S.—a daughter (Jill Patricia).

TINKLER.—On January 8th, 1951, at the Manor Hospital, Walsall, to Marjorie (née Harnaman), wife of Stanley N. Tinkler, L.D.S.—a brother for Susan.

WINN.—On January 8th, 1951, at the Cuckfield Hospital, Sussex, to Gwen (née Close), wife of Capt. H. W. J. Winn, R.A.—a brother for Anthony.

DEATHS

MASON.—On January 21st, 1951, suddenly at his home, The Roses, Warren Road, Bexleyheath, Ernest Noel Mason, L.D.S., R.C.S.Eng., late of 306, The Broadway, aged 77 years.

EDS. R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

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PASSIM

WE suppose that if a list were compiled of all the more devilish mental and physical tortures which have been devised since the middle ages, high upon the list would come the present system of qualifying examinations. That it is difficult to provide an alternative we know. That medical students could hardly be allowed to practice their art upon the public without giving some evidence of a reasonable degree of competence we fully appreciate. But that the present system is the best possible we hotly deny. We all know of admirable doctors with " poor " degrees. We all know of poor doctors with splendid degrees. More, we know of doctors with the highest possible degrees to escape whose ministrations we should run or crawl many miles. In any group of candidates sitting an examination there are always one or two of these future menaces, whose heads are full of facts but not of knowledge, but who pass their examinations. There are always a few known to their colleagues as reliable, gentle and trustworthy students, often not clever, but who will make admirable doctors, and far too many of these fail. That some wrong people may pass and some wrong people may fail is condemnation enough of the present system. There ought not to be an element of chance in these examinations. No one minds taking chances, but personally we prefer to take them on the race course where we can assess the odds and where we can choose the stake, not in the examination hall where an unlucky question may lead us into a morass of cross examination which will have us quickly talking nonsense. These are criticisms of examinations, not of examiners. On the whole examiners are reasonable mortals like other folk. There are good examiners, patient and kindly, who bring out the best in candidates. There are others whose brusque and impatient natures bring out the worst. But these are no more than normal variations in human nature and if we condemn all examiners to everlasting perdition it is only because tradition demands that we should do so and because, drat them ! they still stand between us and our purpose.

It seems to us that the solution is for qualifying examinations to be held internally on the same lines as the 2nd M.B. examination. It is perfectly possible for such an examination to be made uniform in standardwith that at other hospitals by the presence of an external examiner. We do not insist that the hospital record of a candidate shall be taken into consideration, although we do say that in cases of doubt an examiner might well consult it with profit. Surely the record of a student over the previous five years or so is at least as valuable a guide in assessing his suitability as a doctor as the result of a written paper and a few oral and clinical examinations which can but cover a fraction of his syllabus. We believe furthermore that such a system of internal qualifying examinations would make the avowed aim of teaching at Guy's easier of achievement—to teach students medicine and dentistry and not merely how to pass examinations.

We conceive it the privilege of a famous teaching hospital not only to lead the way in the practice of medicine but to pioneer in research, in administration, in nursing, indeed in every aspect of medical life. An important aspect is teaching and if a better examination system makes for better teaching and better doctors such a system ought at least to be tried without delay.

Obituary

Dr. ROGER GRIFFITHS

DR. ROGER GRIFFITHS, who died at Aberystwyth at the end of last year, entered Guy's in the early nineties of last century. He was remarkable for being an ardent follower of the Rugby game, a most pleasant student colleague and one of the most efficient dressers that I have ever known in the old days of chronic septic wounds which were associated with tuberculosis of the bones or joints. He made his patients comfortable and pleased that they had been dressed by him. With simple or compound fractures he was equally good, and most painstaking, knowing that the easy position, so difficult to obtain and retain, was probably the most satisfactory mechanical method of cure. Mr. F. J. Steward's son, now at Tadworth, was the only dresser that I have met of more recent years who shared Griffiths' gifts in this respect. With regard to his football career at Guy's, he played at one time for the Second XV., but gave up playing in favour of watching the game. I remember his coming to Cambridge to watch Guy's play the University and being an ardent follower of the then beginning London Welsh side when that team took a team to Newport to play that club for the first time. There were several Guy's men in the side including A. H. Wall, R. C. Lawry, and Edward Morgan, and Griffiths on the touchline who made a most cheering spectator. When he left Guy's in 1904 he went to Brecon Hospital as R.M.O. and afterwards settled at Newbury Bay on the coast of Cardigan. I stayed with him and his wife two years ago at their home in the neighbourhood and he was exactly the same as he had always been, cheery and knowing everybody in the town and surrounding large district and taking a thorough interest in the work of Medical Officer of Health of that region.

He kept working to the last. I do not suppose there were many people at Guy's who were better known than Roger Griffiths. He was an ardent yachtsman and in informing me of the needful weight on an acting anchor chain made me reflect on the function of the mesentery and intestines relative to the spinal column which I will leave to your junior readers to work out.

A.R.T.

February		ACADEMIC
		Exhibition. Surgical Department. "The Surgical Treatment of Pain."
12th	1.00.	Mr. Atkins. Clinical Lecture. "Recent Advances in the Treatment of Carcinoma of the Breast."
13th	1.00.	Sir Charles Symonds. Clinical Lecture. "Migraine."
	5.15.	Dental Society. Mr. Murray Wolfe. "A History of Dental Extractions."
14th	4.45.	Science Club. Drs. D. O'Neill and R. MacKeith. "Recurrent Abdominal Pain in Children; Causes and Mechanism." Staff Common Room. (Tea 4.30.)
15th	1.00.	Professor Samuel Reynolds, Research Professor, Carnegie Institute of Embryology, Baltimore. Clinical Lecture. "Maternal Blood Flow in the Gravid Uterus."
	4.30.	X-Ray Meeting. Gordon Museum.
16th	2.15.	Medical Department. Combined Round. Preclinical Classroom.
19th	1.00.	Dr. Harris. Clinical Lecture. "Cardio-vascular distress during Anæsthesia."
	12.00.	Professor W. E. Herbert. Dental Clinical Lecture. "Clinical Cases." Dental Theatre.
20th	1.00.	Dr. Donald Hunter, M.D., F.R.C.P., Director of Department for Research in Industrial Medicine, London Hospital. Clinical Lecture. "The Metals and their Compounds."
22nd	1.00.	Sir Heneage Ogilvie. Clinical Lecture.
	4.30.	X-Ray Meeting. Gordon Museum.
23rd	1.00.	Dr. Mann. Clinical Lecture. "Primary Atypical Pneumonia."
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
24th	10.00.	Surgical Department. Clinico-Pathological Meeting. Anatomy Theatre.
26th	1.00.	Dr. Donald Hunter, M.D., F.R.C.P., Director of Department for Research in Industrial Medicine, London Hospital. Clinical Lecture. "Aromatic and Aliphatic Compounds."

SPORT

14th	Rugby "A" XV *v.* St. John's College, Cambridge. (H.O.P.)
17th	Rugby 1st XV *v.* Aberavon. (H.O.P.)
	Rugby "A" XV *v.* Gravesend. (Gravesend.)
24th	ENGLAND *v.* FRANCE. (TWICKENHAM.)
	Rugby 1st XV *v.* Llanelly. (H.O.P.)

"Baltimore and Boston"—a Diary

By SIR HENEAGE OGILVIE, K.B.E., M.Ch.

MUCH as I have enjoyed my visits to the United States in the past, and much as I have learned from them, I had no intention or expectation, of going there again within a year of my tour in December, 1949. However, I had the good fortune to be selected to represent the surgical side of Guy's at Johns Hopkins under the scheme of exchange professorships, and I eagerly seized the opportunity, not alone to return to Baltimore, where I had not been since 1937, when Dean Lewis, Dandy, Finney and Hugh Young reigned, but to take part for the first time in the day-to-day work of this world famous university.

With my wife I left Heath Row in a strato-cruiser at 3.0 a.m. on Sunday, September 17th, and, after stops at Iceland and Newfoundland, arrived at Idlewide Airport at 6.0 p.m. (New York time) the same day. Customs were extremely courteous, agreed that I might bring in my surgical instruments as privileged gear, and did not even open the bags. The only shock was the new Head Tax on entry, 8 dollars each, or £3 10*s.* 0*d.* out of our allowance of £5 0*s.* 0*d.*

My girls had been in Canada, visiting friends to whom they had been evacuated during the war, and they stayed with us for a week in New York, before returning to England. We saw many shows, including South Pacific, but that is not a surgical matter.

Tuesday, 19th September. Henry Cave sent his car round at 10 to take Magdalen and the twins round the town. At 11.30 Frank Adair came and fetched me. He took me to the Memorial Hospital where I had lunch and met Whipple, Martin, Coley, Brunschwig and many others. After lunch I looked round the research departments. A tremendous amount of clinical research, including special air conditioned wards for metabolism experiments with tracer substances. McNeer had just finished a total gastrectomy plus right hemi-colectomy. He is taken with the idea of total gastrectomy for most cancer cases. Says they followed up the P.Ms. on cases dying after gastrectomy in a group of New York hospitals, and found about 50 per cent. showed recurrence in the gastric stump and 8 per cent. in the duodenal stump in round 100 (about 109) cases investigated. His mortality for total gastrectomy is about 10 per cent. : for partial about 8 per cent. He rarely goes into the thorax, but may mobilise the costal margin by resecting cartilages.

Many things in research. Both cortisone and ACTH seem to benefit leukæmias, but if persisted in give Cushing's Syndrome. First two courses do good, after that resistance develops. Radio-active iodine used with success in secondaries of malignant thyroid shewn by tracer tests to absorb 80 per cent. to 90 per cent. of iodine. Those that do not do so at first, may do so after total thyroidectomy and a course of Thiouracil.

Wednesday, 20th September. Went along at 8 to the Roosevelt, Patterson doing a thyroid. Incision as usual. Divides strap muscles. Interesting point was that instead of thyroid retractors he put two claw forceps on the subcutaneous layers of each flap, and held them back with tapes. Removed right lobe very radically (colloid nodular). Separated isthmus from trachea with hæmostats, cut outwards, picking up vessels on inner border of lateral lobe. Drained with soft rubber. Clips to skin. Dressing fixed with a band of strapping 26 inches long, with 8 inches of gauze in the middle to protect neck, crossed in front.

Then he started to do a hernia. Direct tubular sac, which he excised. He was going to do a Bassini and Tanner slide. Henry then explored an abdomen, in which he had done a first stage Lahey, but found the growth widely fixed to the bladder and pelvic floor and had to give it up.

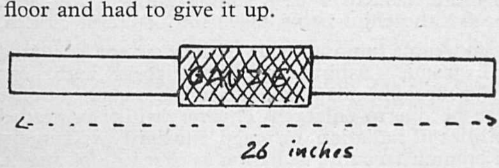

Fig. 1

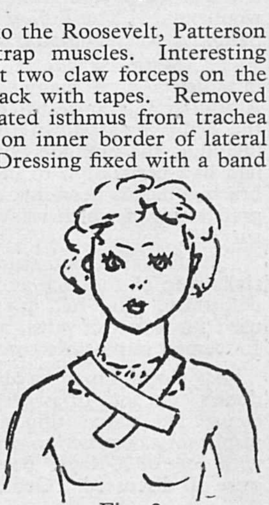

Fig. 2

I did a round with some of the residents. The relapsing pancreatitis I saw last year had had a partial gastrectomy and further pancreatic drainage, and was said to be better but in danger of becoming a drug addict. Several interesting fractures and emergencies. We discussed the non-operative treatment of duodenal perforations. I upheld the view that it was the right treatment of minimal perforations already sealed off when first examined, but for no others. There was one girl of 18 who had had vague abdominal symptoms for the best part of a year and been investigated without result: then she came in as an emergency and was found to have burst her sigmoid above a carcinoma. There were secondaries everywhere. Lying in bed she looked very pretty and very well.

Lunch with Henry Cave at his Club.

In the afternoon I went to watch Hays Martin at the Memorial Hospital. He had an elderly Cuban with a cancer of the floor of the mouth, involving the base of the tongue and the alveolar margin. He made the usual three legged incision, but at the lower end bifurcated it to give wide access to the lower cervical glandular chain, and at the top removed the middle third of the lip to shorten it to fit the stump of the tongue to which it would be sutured. He started at the bottom, taking the sternomastoid off the clavicle, and did a very radical block dissection, using nothing but scissors. He removed everything except internal carotid and vagus, ligating the external carotid above the superior Thyroid branch. He then turned back the cheeks off the jaws, and divided the mandible on each side just below the coronoid notch. He cut across the back of the tongue about one inch above the epiglottis, and removed most of it. Then he closed up lip to base of tongue. A good deal of blood loss, carefully controlled. The suturing was meticulous, a lot of deep sutures being put in to close dead space.

I walked back with Martin. Had one drink in his apartment, and then to Barbizon. We went to Radio City, where the film was Sunset Boulevard, and had steaks at The Virginian afterwards.

Thursday, 21st.

Back to Memorial Hospital at 8.30, to the Head and Neck Tumour Clinic. First rate show, with all the young men present, and free and really constructive discussion of each case.

1. Woman aged 40. Parotoid tumours had been removed three times previously. Seen at 4th recurrence with a fixed mass about 4 inches in diameter. She had facial paralysis, and X-Rays showed metastases in both lungs. She was in great and constant pain. A huge dissection was done about a week before, removing parotid, half the jaw, and all structures on the side of the neck down to the wall of the pharynx and the internal carotid artery. On this were laid a group of skin grafts stitched together. It looked as if about 60 per cent. would take. The hole was enormous, but the woman said she had lost her pain and was happier.

2. A similar case but more so. The lesion was an X-Ray cancer arising in radiation given many years ago to the right side of the neck for T.B. glands. A similar but more extensive operation was done, the hole extending from the right malar down to the clavicle, and everything had been removed, including the common carotid, vagus nerve and half the thyroid gland. They had had permission to include an inter-scapulo-thoracic amputation had the brachial plexus been involved. The defect was covered by a huge dermatome graft, most of which was going to slough. Too early to assess any result but survival.

3. Female baby, three months. A huge hæmangioma involving all the right side of the face and neck and the upper part of the chest. Dreadful deformity. Had had one injection of Sotradecinol, a sclerosing soap solution used for varicose veins, and there seemed to be a solidification at this site. It seemed impossible to conceive the child being made into a useful citizen.

4. Child 6 months old: moveable lump left side of neck size of lobulated duck's egg, sent in as cystic hygroma. Aspiration biopsy suggests malignant connective tissue tumour, ? neuroblastoma ? rhabdo-myo-sarcoma. Some respiratory obstruction said to be due to enlarged Thymus, which improved with dose of X-Rays. Possibilities of radiation, nitrogen, mustard and surgery were all discussed. General opinion favoured radiation as first line of attack.

5. Male of 39. Discharge from right ear and swelling in front of it. Several biopsies outside: report said to be carcinoma. Pathologist, seeing these sections, says they are not typical squamous carcinoma and queries secondaries from testicle. The testicles are normal. On examination the growth looks like a typical squamous epithelioma arising in the meatus, with a malignant pre-auricular gland. There was a discussion as to what could be done; the general opinion, among this group accustomed to major adventures, was that radical extirpation of the middle ear and petrous temporal bone was hardly feasible.

6. Woman of 60. Epulis excised elsewhere. Recurred. Now squamous epithelioma on left lower alveolar margin in canine region. Bone involved and floor of mouth infiltrated locally, but radical surgery of not too destructive nature possible. They seem determined to put in a bone graft at the time rather than later.

7. Woman of 46. Tumour of lower lip treated over 27 years by radium and excision. 10 or 12 radium treatments in all. Now a scar over lower lip and chin that seems more radiation than surgical, with a radiation cancer in it. Cancer appears of low malignancy: fairly local excision should be adequate.

They have on their books about 150 cases of cancer arising in the scars of radiation, often given for cancer, often for non-malignant conditions.

8. Baby about a year. Hæmangioma left side of face. Photograph suggests it has progressed relentlessly in spite of treatment, but those in charge seem to think it is a bit better lately. They propose segmental resection.

At 10.00 I went up to see Alexander Brunschwig.

1. Local repair of vesico-vaginal fistula following hysterectomy.

2. Recurrence in vaginal vault following Wertheim. He first dissected vagina from rectum and bladder below; then, finding it fixed, he went in through the abdomen, removed bladder and vagina, and put ureters into upper rectum. A lot of blood lost and 5 pints put in. The ureter was pulled in through a stab hole by one stitch fixed to the obliquely cut termination.

After hearing much and reading much about pelvic evisceration and radical surgery for advanced cancer I was very interested to meet Brunschwig. He is a most charming, modest and kindly man, and there can be no doubt about his honesty and his sincerity. Whether his pelvic evisceration (known colloquially in this Memorial Hospital as the "All America") has the place in treatment that he seems to assign to it is open to question, but certainly women whose cervical carcinomas have recurred locally, and who have severe pain and a vesico-vaginal fistula yet no distant metasteses, are very much better after it, and may be cured.

Everywhere in New York Zephyran is used for the skin, a chameleonic mixture that is red when poured on and turns yellow. It is slopped on in bowlfuls.

In the evening we went to South Pacific, after a good and expensive dinner at the hotel. The play was splendid.

Friday, 22nd.

Twins left for the aerodrome. I went at 9 a.m. to New York Hospital (Cornell University) to see Glenn, Heuer's successor as Professor of Surgery.

First case. Gall bladder in a surgeon's wife. She had a hiatus hernia, but it was thought that her gall stones were responsible for the symptoms. He removed the gall bladder sub-peritoneally from the fundus down by very careful dissection. Kocher's incision.

Second case. Common duct, fourth or fifth operation. At the last one a T loop of jejunum was brought up to the stump of the hepatic ducts. This junction had re-strictured. He exposed the anastomosis and opened the jejunum just below it. By holding up the incision he found the strictured opening and dilated it with curved forceps, when a gush of bile came out. He passed forceps up into the hepatic duct, cut on their points and put in a large T tube which he will leave in permanently.

In the other theatre was an inguinal hernia in an infant, a blank laparotomy for cancer of the stomach and a repair of a ventral hernia following transverse colostomy by a Mayo overlap. The surgeon asked me which way I did the overlap: " Do you sew the vest over the pants or the pants over the vest as I am doing ? " Another phrase that amused me was " booties " (American for goloshes) for the rubber tubes over mattress sutures.

Leaving the hospital I picked up a taxi driver called Maurice Edelsten, who at once engaged me in conversation, as all New York taxi drivers do. He had had the right half of his tongue removed and a block dissection of the right side of the neck five years before at the Memorial Hospital. There was little noticeable deformity and he talked well. " After five years, I guess I am in the clear," he said. I guess he was.

I had lunch with Richard Lewisohn at the Plaza and he then took me to Mount Sinai. Garlock was operating on a boy of 6 who had had massive and repeated hæmorrhages from œsophageal varices, due to " caverno-angeiomatous degeneration of the portal vein "—a new disease to me. Barium swallow showed varices involving the whole length of the œsophagus. He had already had splenectomy, and peri-œsophageal packing in the neck and thorax (the object of this is to encourage peri-œsophageal anastomoses to relieve the submucous ones) but Garlock has found it ineffective.

He resected the 7th left rib, and mobilised the thoracic œsophagus from the diaphragm behind and above the aortic arch. He then opened the diaphragm and took a long time to mobilise the stomach, which was widely adherent owing to the previous splenectomy. He then divided the cardia a bit beyond the œsophagus, in order to excise cardiac varices, and invaginated. He wrapped cellophane round the lower end of the œsophagus, tied it with a stout ligature, passed the ligature with curved forceps behind the aortic arch, and pulled the œsophagus through. He then brought down the œsophagus in front of the arch and anastomosed it to the fundus about the level of the arch, cutting a circular hole in the stomach.

I went back to the Memorial Hospital and gave a short talk to the Interns and Residents on surgical training. Ewing (Postgraduate Hospital, Hammersmith) has just arrived there for a year's assignment.

Saturday, 23rd.

Took the train at the Philadelphia Station for Baltimore. Taking a train at a New York station is harrowing enough to produce any number of duodenal ulcers. The trains depart from underground platforms reached by long tunnels, but the platform from which any train will depart is unknown till quarter of an hour before it goes, and then it is announced on a loud speaker that emits a noise like ten sea-lions at feeding time, but from which no intelligible syllables can be distinguished. The only chance of catching the train is to park one's wife and luggage and run round the main hall in circles, scanning every queue that lines up, and asking every one who wears a peaked cap or an air of authority.

We were met at Baltimore station by Henry Bahnson, who was over with Blalock four years ago, and taken to Johns Hopkins where we were given a fine room. Then we went to Blalock's, where there was a supper with Bill Rienhoff, Mark Ravitch, Henry Bahnson and Dick Kieffer, the two residents, and the wives with the exception of Mrs. Ravitch.

(*To be continued*)

BOXING

The annual Open Boxing Tournament under A.B.A. Rules organised by Guy's Hospital Amateur Boxing Club in aid of the funds of the Pavy Gymnasium will be held at Seymour Hall, Marylebone, W.1, on Tuesday, 13th February, at 7.15 p.m. The programme will consist of a special team match between Guy's and the Metropolitan Police supported by special contests between prominent boxers of well known amateur boxing clubs.

Prices of admission are: 12*s.* 6*d.*, 10*s.*, 7*s.* 6*d.*, 5*s.*, 2*s.* 6*d.*, all numbered and reserved. Tickets are obtainable from the Counting House, Guy's Hospital, S.E.1 (HOP 1086); G. A. R. Winston (HOP 3500, Ex. 381); A. S. Atkinson (Hon. Sec. ; Seymour Hall (PAD 8018) or any member of Guy's Hospital

Sherlock Holmes and Dr. Watson

A MEDICAL DIGRESSION

By MAURICE CAMPBELL, O.B.E., M.D., F.R.C.P.

Reprint of a pamphlet (now out of print) which was elaborated from a Clinical Lecture given at Guy's and a paper read to St. Bart's Abernethian Society in 1934.

I.—THE MEDICAL KNOWLEDGE OF DR. WATSON

> " One likes to think that there is some fantastic limbo for the children of imagination, some strange impossible place where the beaux of Fielding may still make love to the belles of Richardson, where Scott's heroes may still strut, Dickens' delightful Cockneys still raise a laugh, and Thackeray's worldlings still carry on their reprehensible careers. Perhaps in some humble corner of such a Valhalla Sherlock and his Watson may for a time find a place. . . ."
> —*Conan Doyle ; Preface to " The Case Book of Sherlock Holmes."*

AMONG the many well-known characters of Victorian fiction Sherlock Holmes and Dr. Watson have found a secure place. For the middle-aged, who remember their adventures in old *Strand Magazines*, most modern detective stories provide a poor substitute, though the prototype on which they have been roughly modelled is only too obvious. During the last few years this interest has led to several investigations in the life history of Holmes and his faithful companion.* None of these have dealt specifically with the medical problems involved, though these are of great interest, for Watson's views can be taken as representative of the solid practitioner of the late Victorian age, and the more specialised and scientific knowledge as the special métier of Holmes. Had Watson not been a doctor the stories would have lost a good deal in accuracy.

Naturally, when dealing with crime there must be many medical details, but it is surprising how many incidental references there are in addition, showing that Watson was really interested in his profession and looked at life from a medical angle. For example, instead of reading that Victor Trevor was the sole surviving child, which is all that is essential from the story, we are told that his only sister had died of diphtheria in Birmingham (The Gloria Scott). Similarly we read that Dr. Grimsby Roylott's wife had been killed in a railway accident at Crewe (The Speckled Band), that Ronald Adair's mother had returned from one of the Australian colonies to undergo an operation for cataract (The Empty House), and that old John Turner, whose natural death was needed to save him from the gallows, had suffered from diabetes for some years (The Boscombe Valley Mystery). Possibly his limp, the impressions of which in the end helped Holmes to trace him, may have been due to diabetic neuritis, for he died within seven months.

Since then, with the general use of anti-diphtheritic serum (1896), and with the discovery of insulin (1922), two of these tragedies might have been avoided. And if it is still possible to be killed in a train, such a death is now rare compared with death in a motor accident.

Any medical reader must be struck by the careful descriptions of the appearance and build of some characters, and will notice that the diseases from which they suffered are often found in people of such constitution. For example, there is the excellent account of the mental and physical characteristics of one type of hypochondriac, Thaddeus Sholto : " A high head with a bald, shining scalp, and yet an impression of youth—his features in a perpetual jerk. . . . He began at once on Watson's arrival—' Have you your stethoscope ? I have grave doubts as to my mitral valve, if you would be so good. The aortic I may rely upon, but I should value your opinion on the mitral.' Watson listened and could find nothing amiss. When they left his house to drive to Norwood he finished his attire by putting on a rabbit-skin cap with hanging lappets which covered the ears. ' My health is somewhat fragile,' he remarked in his thin, high voice, ' I am compelled to be a valetudinarian ' " (The Sign of Four). A troublesome type of patient whom we all know only too well.

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*" Dr. Watson : Prolegomena to the study of a Biographical Problem," by S. C. Roberts (Faber & Faber, 1931) ; " Sherlock Holmes : Fact or Fiction ? " by T. S. Blakeney (John Murray, 1932) ; " Sherlock Holmes and Dr. Watson : The Chronology of their Adventures," by H. W. Bell (Constable & Co., 1932). I did not allow myself to read Mr. Bell's scholarly masterpiece or the work he has edited more recently, " Baker Street Studies " (Constable & Co., 1934), until I had completed this paper and, as will be seen, have not always reached the same conclusions about the dates of the stories.

Or we have the picture of the lady who killed the professor's secretary, who was so short-sighted that she was forced to wear concave glasses of unusual strength—" with remarkably thick nose, with eyes set close on either side, with a puckered forehead, a peering expression and rounded shoulders, and yet with a long and obstinate chin." In spite of her somewhat unattractive exterior she showed that she was a woman of high ideals and quick decisions " (The Golden Pince-Nez).

Or again, the picture of Mr. Henry Baker, whose characteristics were so accurately deduced from his battered black felt hat—" a large man with a massive head and broad, intelligent face—a touch of red in nose and cheeks with a slight tremor of his hand," which recalled Holmes' surmise as to his habits. He spoke in a low staccato fashion, choosing his words with care, and gave the impression of a man of learning who had had ill usage at the hands of fortune (The Blue Carbuncle).

All these are familiar faces at Out-Patients, and we see Watson was interested in the constitutional types who are prone to particular diseases, a study brought to a more formal and scientific status by the researches of Draper. As another illustration there is the picture of James Armitage, alias Trevor, who died from cerebral hæmorrhage, probably from the posterior inferior cerebellar artery. On receiving a message about flypapers and hen pheasants, which meant so much to him and so little to everybody else, he began running round the room in little circles, and when laid on the sofa by his son his mouth and eyes were puckered to one side and a stroke was correctly diagnosed. The paralysis spread, and he barely recovered consciousness and died about twelve hours later (The Gloria Scott). Six months before he had had a short syncopal attack, add explained it away as due to a weak heart, but almost certainly this must have meant high blood pressure with cerebral angiospasm rather than an ordinary faint, and the suddenness of the attack was stressed. His build bears out this diagnosis—he was a thick-set, burly man, with a brown weather-beaten face and blue eyes keen to the verge of fierceness; he must have been about forty-eight, and had had a hard life in the goldfields of Australia.

In all stories of this type, murder and sudden death must figure largely, and the way in which these are handled gives a good indication of medical knowledge. Watson realised clearly that, where death took place almost at once, it was generally from injury to the heart, *e.g.*, William, the coachman, who never spoke again, was shot through the heart (The Reigate Squires); Hilton Cubitt died instantaneously, for the bullet had perforated the heart (The Dancing Men); and Stangerson, who died so quickly that even in Halliday's Private Hotel no one heard a sound, had received a deep stab in the left side, penetrating the heart (The Study in Scarlet).

On the other hand, when Woodley boasted that Carruthers was too late because Violet was now his wife, and received a revolver bullet through his chest with the prompt reply, " No, she's your widow," Watson was at once able to say that he would live, in spite of his dreadful pallor, because the bullet had only passed through his lungs (The Solitary Cyclist). In the same way the young secretary had time before he died to murmur, " The Professor—it was she," when he was stabbed by the short-sighted lady and received a small, deep wound which divided the carotid artery (The Golden Pince-Nez). Watson himself had been more fortunate when he was wounded in Afghanistan, for the bullet just grazed the subclavian artery (The Study in Scarlet), and after his wound had healed left him with nothing worse than occasional rheumatism.

Watson realised, too, that, apart from the heart, the medullary centres in the brain are most likely to produce rapid, but not quite instantaneous, death. McCarthy was killed from a heavy blow which shattered the posterior third of the left parietal bone and the left half of the occipital bone, but his son had time to run back 150 yards and hear his mumbled words about Ballarat (The Boscombe Valley Mystery). Heidegger, the German master, when his skull was crushed by a savage blow fell from his bicycle, mounted again and rode some yards before he died (The Priory School). Selden, the Dartmoor convict, when he fell on the rocks flying from the Hound of the Baskervilles, was heard to be moaning before he died from a fractured skull. We do not know how soon the trainer died after his skull was shattered by a kick from his horse, but he must have fallen unconscious at once, for he cut himself with his tenotomy knife as he was falling (Silver Blaze). On the other hand, when Watson found the groom unconscious, but with a terrible cut on the head, a glance told him that it had not penetrated the bone, so that he felt justified in hurrying on to try and rescue the " Solitary Cyclist."

In most of these cases enough facts are given for one to say that the results are such as would be expected medically from the previous events, and that Watson had accurate knowledge on these subjects. Trevor's symptoms before his death are described so fully that one can make a diagnosis of the actual artery which ruptured and produced the fatal cerebral hæmorrhage ; almost certainly Watson must have witnessed such a case, because the description is more detailed than would be found in most shorter medical text-books.

There are two sudden deaths of special interest, because the circumstances were such as to raise a suspicion of foul play. In one we are told the findings at the inquest, and the facts described lead to the same conclusion ; in the other the symptoms are given in sufficient detail to enable one to make the correct diagnosis.

Captain Morstan and Major Sholto were having a rather heated discussion about the Agra treasure when Morstan, springing from his chair in a paroxysm of anger, with his face a dusky hue, suddenly pressed his hand to his chest and fell backwards and cut his head on a box. Major Sholto found that he was dead, and as they had been quarrelling, even Sholto's own servant assumed that he had killed Morstan with a blow. Morstan had suffered with his heart for some years, and this, with the pain in the chest and the cyanosis, point to a syncopal attack associated with angina pectoris (The Sign of Four).

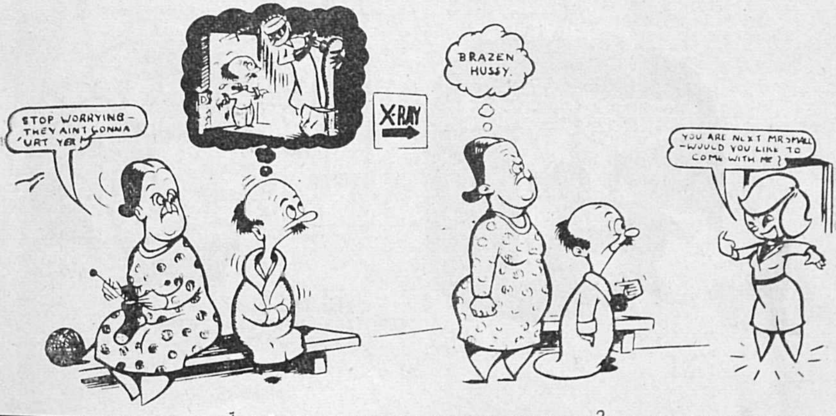
Colonel Barclay died under similar circumstances after a quarrel with his wife, and so she was accused of causing his death, but at the inquest the verdict was cerebral hæmorrhage, with external injuries resulting from his fall. The converse was illustrated in a well-known murder trial of a few years ago, famous because of the finding of the body in a railway cloak-room, the defence being that the woman had injured her head on the fender by a fall, but the prosecution successfully maintaining that the injury to the head was the result of a blow. In the story the hæmorrhage had followed the sudden shock of seeing an old rival, whom Barclay thought he had murdered twenty years before, at a moment when his blood pressure was already raised by quarrelling with his wife (The Crooked Man).

Both these natural deaths occurred as the result of emotional causes during quarrels. It is a popular, but incorrect, view that many illnesses are due to such external factors. Watson, however, has carefully chosen cases where it was likely to be correct for excitement of any sort, especially anger, may precipitate an attack of angina or cerebral hæmorrhage, whether by raising the blood pressure or otherwise.

It would take too long to review all that is of medical and scientific interest, but I have collected as examples most of the allusions to heart disease and to tropical disease because in these two subjects at any rate Watson seems to have been excellently informed.

"THE ADVENTURES OF PERCY THE PATIENT"
or HOW TO TAKE A BARIUM MEAL

(By kind permission of the Dept. of Radiography)


STOP WORRYING – THEY AINT GONNA 'URT YER!
X-RAY
BRAZEN HUSSY.
YOU ARE NEXT MR SMALL – WOULD YOU LIKE TO COME WITH ME?

DISEASES OF THE HEART

There are two detailed descriptions of heart disease and many shorter allusions, as well as the death from angina just described. Major Sholto died from left ventricular failure, probably secondary to high blood pressure; and orthopnœa, is rightly emphasised by Watson as a leading symptom. "When we entered his room he was propped up with pillows and breathing heavily . . . grasping our hands he made a remarkable statement in a voice broken as much by emotion as by pain. . . . At this instant a horrible change came over his expression—his eyes stared wildly, his jaw dropped, and he yelled, 'Keep him out.' We rushed to the window, and when we returned his head had dropped and his pulse ceased to beat." (The Sign of Four). No wonder his son, Thaddeus Sholto, became hypochondriacal about his mitral valve.

The other is a good description of an aortic aneurism. When Jefferson Hope was arrested he remarked that he might not live for the trial. "It isn't suicide I am thinking of; put your hand on my chest," he said. Watson did so, and at once became conscious of an extraordinary throbbing and commotion inside. The walls of his chest seemed to quiver as a frail building would when some powerful engine was at work. In the silence of the room he could hear a dull humming and buzzing noise which proceeded from the same source.

I sometimes wish that you could all use an equally dramatic style in writing your ward reports.

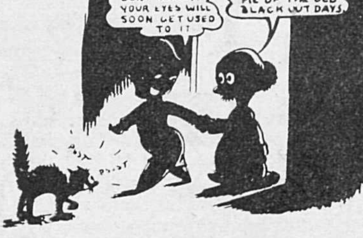
"Why," cried Watson, "you have an aortic aneurism."

"That's what they call it," he said frankly. "I went to the doctor last week, and he told me it was bound to burst before many days passed."

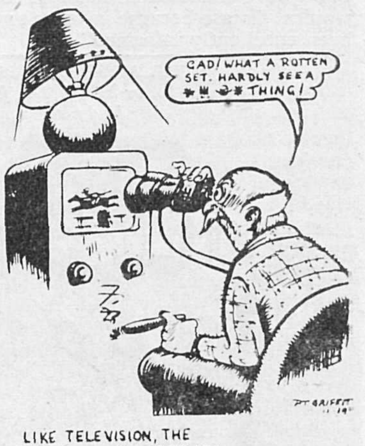
The ætiology was wrongly attributed by Watson to exposure and under-feeding among the Salt Lake Mountains, but the prognosis was better than in a patient seen recently, who had been told eleven years before that his aneurism might burst any day, for on the very night after his capture this happened, and he was found stretched on the floor of his cell with a placid smile on his face as though he had been able to look back on a useful life and on work well done. He was a robust and ruddy-faced man, tall and of great strength, and no doubt his hard-working life was a contributing factor in the production of the aneurism.

The death of Sir Charles Baskerville was attributed to heart disease, and, though the medical details are fairly satisfactory, it is possible to be critical here. The newspaper account of the inquest said that there was no reason to suspect foul play or to imagine that it could be from any but natural causes. The evidence of the housekeeper was that his health had been impaired for

THE RAY ROOM IS ONLY
LIT BY A SMALL RED BULB.
WATCH YOUR STEP—MIND THE CAT.


DON'T WORRY. YOUR EYES WILL SOON GET USED TO IT
OO-ER REMINDS ME OF THE OLD BLACK OUT DAYS.
PSST
PSST

3


GAD! WHAT A ROTTEN SET. HARDLY SEE A *!!@* THING!
PT GRIFFIT
19

LIKE TELEVISION, THE
SCREEN IS EASIER TO SEE
IN THE DARK . . . .

4

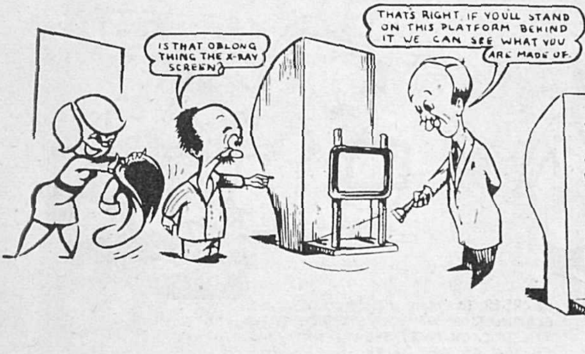
some time, and that the breathlessness, changes in colour, and attacks of nervous depression pointed to some affection of the heart. Dr James. Mortimer, his medical attendant, gave evidence to the same effect (and I hope you will not have the same experience of your evidence being dismissed in this cursory fashion after so much attention had been given to that of the housekeeper). No signs of violence were to be discovered upon Sir Charles's person, but the facial distortion was explained as a not unusual symptom in death from cardiac exhaustion. The post-mortem examination showed longstanding organic disease, and the coroner's jury returned a verdict in accordance with the medical evidence.

But Dr. Mortimer had suppressed the finding of the footprints of a gigantic hound, and we know that it was in running desperately from this that his diseased heart gave out. My criticism here would be that facial distortion is not a usual feature of cardiac deaths ; that angina pectoris is the only likely cause of sudden unexpected death, in which case he would probably not have moved from the gate, and that patients do not usually die in their first attack of angina (Dr. Mortimer would certainly have stated at the inquest that he had suffered from angina previously if this had been so) unless they have an infarct, which should have been revealed by the post-mortem. Perhaps this is expecting too high a standard, for though, of course, coronary infarction was well known to pathologists, the clinical picture of coronary thrombosis was not recognised till some years later (1912).

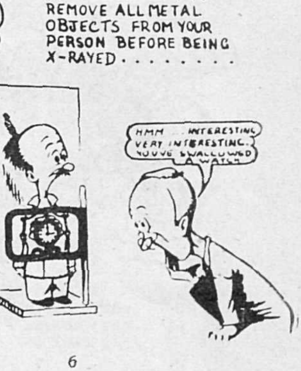
In any case Sir Charles had old-standing heart disease, presumably myocardial degeneration, and died from the effects of his fright and sudden exertion on this diseased heart muscle. As he was about fifty and there was a family history of sudden deaths, it is all a very reasonable series of events from the medical point of view, and these minor criticisms only show what a high standard of accuracy Watson has led us to expect.

Among the shorter allusions we read of the young science master whose life had been crippled by heart trouble following rheumatic fever (The Lion's Mane), suggesting that Watson realised this was the most likely cause of heart disease in a young man. A later stage of rheumatic heart disease is described in Lady Beatrice Falder, who was known to have had heart disease and had been incapacitated by her dropsy for some years (Shoscombe Old Place) ; probably from the length of the history she had auricular fibrillation and mitral stenosis. When she died from increasing dropsy her brother tried to dispose of the body and employed someone to act her part, so that he might keep her estate long enough to win a fortune on the Derby. His ingenious scheme was rewarded, and the coroner took a more lenient view of the transaction than seems likely.

When the managing director of the mythical Franco-Midland Hardware Company was cut down as he tried to hang himself, Watson stooped down and examined his pulse. It was feeble and intermittent, but as his breathing grew


IS THAT OBLONG THING THE X-RAY SCREEN?
THATS RIGHT IF YOU'LL STAND ON THIS PLATFORM BEHIND IT WE CAN SEE WHAT YOU ARE MADE OF.

5


IT IS NECCESSARY TO REMOVE ALL METAL OBJECTS FROM YOUR PERSON BEFORE BEING X-RAYED . . . .
HMM ... INTERESTING VERY INTERESTING. YOU'VE SWALLOWED A WATCH

6

longer Watson remarked that he would recover, though a moment before he was lying with a slate-coloured face, puffing his purple lips in and out with every breath (The Stockbroker's Clerk).

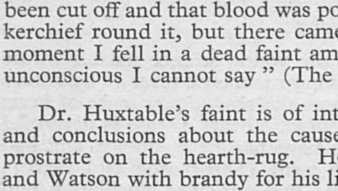
It is doubtful if the works of any other novelist contain descriptions of extrasystoles, of œdema due to fibrillation, of angina pectoris, of aneurism, of rheumatic valvular disease, and of ventricular failure with orthopnœa with such careful adherence to medical probabilities.

On re-reading these stories one is amazed at the prevalence of fainting, and almost surprised to find a story in which someone does not faint. Fainting was generally regarded as the prerogative of the young lady of the Victorian age, but a quick perusal provided me with twenty-one instances, and in thirteen of these it was a man who fainted.

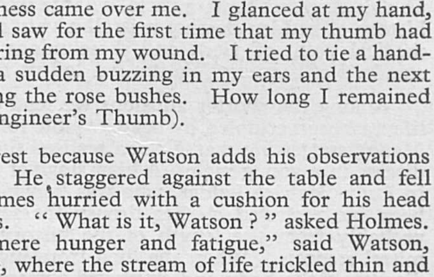
One of the early examples gives the impression that Watson shared the popular delusion that fainting is likely to indicate heart disease (The Gloria Scott). Recollecting that he was trained at St. Bartholomew's Hospital and not at Guy's, this seemed only too likely, but subsequent examples did not support this, and generally in Watson's accounts, as in real life, the cause was simply shock or emotion, as when Watson himself fainted for the one and only time in his life on seeing Holmes return, as he thought from the dead (The Empty House).

There is a clear description of the whole condition with accurate details in one case when loss of blood was an additional factor : " Suddenly, however, as I ran a deadly dizziness and sickness came over me. I glanced at my hand, which was throbbing painfully, and saw for the first time that my thumb had been cut off and that blood was pouring from my wound. I tried to tie a handkerchief round it, but there came a sudden buzzing in my ears and the next moment I fell in a dead faint among the rose bushes. How long I remained unconscious I cannot say " (The Engineer's Thumb).

Dr. Huxtable's faint is of interest because Watson adds his observations and conclusions about the cause. He staggered against the table and fell prostrate on the hearth-rug. Holmes hurried with a cushion for his head and Watson with brandy for his lips. " What is it, Watson ? " asked Holmes. " Absolute exhaustion—possibly mere hunger and fatigue," said Watson, with his finger on the thready pulse, where the stream of life trickled thin and small. The puckered eyelids began to quiver, and soon a pair of vacant grey eyes looked up at them ; an instant later the man had scrambled to his feet, his face crimson with shame (The Priory School). Often the cause was purely emotional, and in this Watson has again made a correct observation. The occasion which seems most untrue to life was when a journalist fainted on finding a murdered man on his own doorstep, and was so upset by it that he was unable to make any copy out of the incident (The Six Napoleons).


TUT-TUT NEVER MIND - NOW YOU KNOW WHY YOU MUST REMOVE ALL METAL OBJECTS BEFORE BEING X-RAYED
I HAVNT - IT WAS IN MY PYJAMA POCKET!

7


ONLY ONE?
WILL YOU HOLD THIS IN YOUR LEFT HAND HAND AND DRINK ONE MOUTH-FULL

IN ORDER TO MAKE A THOROUCH EXAMINATION OF YOUR STOMACH THE DOCTOR MUST SEE IT FILLING AS YOU DRINK . . . .

8

In the Blue Carbuncle we have an example of considerable psychological interest, which, incidentally, shows the fallacy of the American methods of crime detection according to the emotional response. Horner, the plumber, who was innocent, gave signs of intense emotion during the proceedings, and fainted away at the end and was carried out of court; but Ryder, the hotel attendant, who was guilty of the theft, did not lose consciousness when he was unexpectedly accused by Holmes, though he almost collapsed and had to be revived by a drop of brandy.

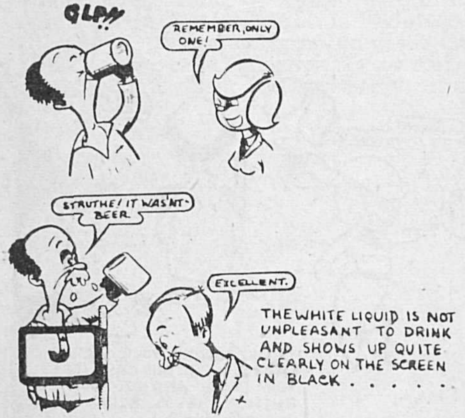
In this question Watson followed the still prevalent lay tradition that brandy is the only treatment for fainting, and that it is more efficacious than other spirits for medical purposes. We frequently read of whisky being drunk for pleasure, but brandy no longer appears in this way as it did in the pages of Dickens. On the other hand, there are at least ten occasions when a sufferer was revived from a faint by brandy. But perhaps Watson realised that it was not really essential, for on the two occasions when Miss Morstan, his fiancée, fainted he only offered her water; however that may be, these were the only times that water was used instead of brandy.

We must feel that Watson observed an unusual amount of fainting, but that, with this exception, he has given a very accurate picture of it, and fully realised that it was due to emotional and general causes and not to heart disease.

DISEASES OF THE CHEST

Consumption is mentioned in several of the stories, and accurately, as a likely cause of death in a young person. Thus the young wife of the Cambridge rugger captain died of consumption of the most virulent kind (The Missing Three-Quarter), and it was the death of the consumptive tutor which led to the collapse of Stapleton's school (The Hound of the Baskervilles). When Moriarty wished to find Holmes alone he recalled Watson to the Swiss Hotel with a faked message about the English lady in the last stages of consumption who had just suffered from hæmoptysis (The Final Problem). In this Watson appeared to share the Victorian view that Switzerland was the correct treatment for consumption, or perhaps he merely knew that it was likely a patient would be sent there by other doctors. He did not share the novelist's convention that the heroine, disappointed in love, went into a decline and died of galloping consumption, though when Miss Hetty Doran heard of the supposed death of her husband, whom she had married secretly, her father had suspected that she had a decline and had taken her to half the doctors in San Francisco (The Noble Bachelor).

Except for these cases of tuberculosis there is not much mention of diseases of the lungs. Detective Athelney Jones, red-faced, burly, and plethoric, with a pair of small twinkling eyes, which look out keenly from swollen and puffy pouches, probably had chronic bronchitis, for this breathlessness and wheezing are mentioned (The Sign of Four), and Mr. McFarlane had asthma (The Norwood Builder).


GLP!!
REMEMBER, ONLY ONE!
STRUTHE! IT WAS'NT BEER
EXCELLENT.
THE WHITE LIQUID IS NOT UNPLEASANT TO DRINK AND SHOWS UP QUITE CLEARLY ON THE SCREEN IN BLACK . . . . .

9

DONT MIND IF I DO
HAVE ANOTHER SAUSAGE.
WE DONT DO THIS BECAUSE IT WOULD MAKE YOUR STOMACH LOOK LIKE THIS . . .

10

NERVOUS DISEASES

These appear in many of the stories, and Watson was evidently interested but less accurate in his knowledge than on other subjects, though we must remember that since then great strides have been made in psychology and in the distinction between diseases which are primarily of the brain and others which are of the mind.

Taking first those with a physical basis in the brain, two cases of cerebral hæmorrhage have already been discussed, and here Watson's knowledge was first-class. St. Vitus' dance is a rather wide term in medicine, because it was originally applied in the Middle Ages to a hysterical dancing gait (chorea major), which was often cured by a pilgrimage to the tomb of St. Vitus, at Zebern, and was unfortunately adopted by Sydenham, the great English physician, to a totally distinct disease with jerky movements caused by the effect of acute rheumatism in the brain (Sydenham's or rheumatic chorea). But Watson uses the term in neither of these senses, for Mr. Latimer, " whose lips and eyelids were constantly twiching like a man with St. Vitus' dance " (The Greek Interpreter), presumably had a nervous tic or habit spasm which some of the older books called habit chorea.

And Dr. Farquhar, who sold his Paddington practice to Watson because he suffered from an affection of the nature of St. Vitus' dance (The Stockbroker's Clerk), more likely had paralysis agitans ; he might have had Huntington's chorea, a hereditary disease ending in madness, but this is a very rare condition. Watson remarks shrewdly that the practice had declined greatly because the public look askance at the curative powers of the man whose case is beyond the reach of his own drugs.

Nor can we think very highly of Watson's knowledge of epilepsy, for he was deceived when Holmes pretended to have a fit (The Reigate Squires). But even Dr. Percy Trevalyan, of King's College Hospital, who was specially interested in catalepsy after winning the Bruce Pinkerton prize for his monograph on Obscure Nervous Lesions, was deceived by the simulated catalepsy of one of the Worthington bank gang when they came to wreak their revenge on Blessington (The Resident Patient).

Turning to the opposite group of purely mental diseases, these are not often referred to, but in the " Six Napoleons " Watson suggested that the destruction of the plaster casts was due to a monomaniac with *idée fixe*, as the modern French psychologists called it—as we can imagine a modern anti-Fascist destroying all effigies of Mussolini. Hysteria is mentioned twice on occasions when it might be expected quite naturally. The first, when Rachel Howells, the Welsh maid, became acutely ill, sometimes delirious, sometimes hysterical, after the mysterious death of the butler who had been her lover (The Musgrave Ritual) ; her subsequent disappearance may well have been an hysterical fugue with genuine loss of memory. The second was when Mr. Hatheley burst into peals of hysterical laughter after Watson had dressed the stump of his thumb (The Engineer's Thumb).

BURP!!
MANNERS
J
SO DONT EAT ANYTHING BEFORE YOUR X-RAY.
WHOOPS!
FINISHED?
11
I'M BIRDIE!
!
NOW HOLD YOUR BREATH AND KEEP STILL - READY .. WATCH THE BIRDIE
GOT IT! GOOD
CLICK!
IT'S LIKE HAVING YOUR PICTURE TAKEN. BUT, IN THIS CASE, IT'S YOUR INSIDE AND NOT YOUR OUTSIDE THAT IS BEING PHOTOGRAPHED.
12

A large number of references are to acute mental illnesses following shock. Thus Mrs. Barclay became temporarily insane from shock when she was suspected of killing her husband (The Crooked Man), and considering all that had been revealed to her that night it was no wonder; perhaps Sarah Cushing might also be included here (*see below*). Even Holmes suffered from an attack of " nervous prostration " from overwork (The Reigate Squires), and later had to go away to Cornwall to avoid a breakdown (The Devil's Foot).

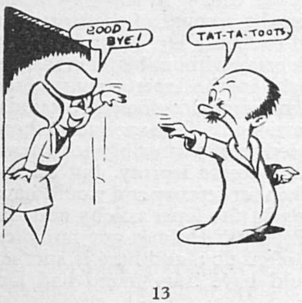
But it is on the question of " brain fever " that Watson was most at fault and failed to realise the " mental " effects of severe and sudden shock. Thus Phelps had a fit at the station followed by nine weeks' brain fever when a valuable document was stolen (The Naval Treaty); Sarah Cushing had brain symptoms of great severity and was not allowed to see anyone, when she alone realised how her sister had been murdered (The Cardboard Box); and even Sir Henry Baskerville was delirious and in a high fever from nervous shock (The Hound of the Baskervilles). These physical effects are not what we should expect from such mental causes in normal people.

Again when Ruscastle's daughter got brain fever from being worried to sign away her inheritance she was at death's door for six weeks, and we hear that all her hair was cut off—a treatment which would hardly be adopted now in a patient with a mental breakdown.

TROPICAL DISEASES

Tropical diseases, with their devastating onset, their dramatic treatment, and their fascinating natural history, in which rats or mosquitoes or liver flukes may play a part, have always been of great interest to the doctor travelling in the East; and as Watson had " an experience of woman extending over many nations and three separate continents " (The Sign of Four), he must have travelled widely, and they could hardly fail to make a strong appeal. All the more so as he himself while recovering from his wound in India was stricken with typhoid, which, no doubt, gave him a special interest in that disease.

Apart from Watson's own attack, when his life was despaired of and he became so weak and emaciated that he was invalided home from Peshawar, we are told that the first Mrs. Douglas had died of typhoid in California. And the house in London in which Enoch J. Drebber, of Cleveland, was murdered (Study in Scarlet) was empty because the last tenant had died of typhoid and the landlord was unwilling to have the drains seen to. It is not quite clear from this last remark if Watson shared the Victorian lay view that bad smells were responsible for diseases such as typhoid, or if he knew that bad drains were only significant because they might contaminate the water supply. Anyhow such an occurrence is now unlikely in London, and the virtual disappearance of typhoid in England with improved sanitation (the death rate was 174 per million in 1891–1900 and only 35 per million in 1911–20), and its prevention, even during the Great War, by typhoid inoculation (Wright, 1904) must have given Watson immense pleasure, for he had described it as that curse of our Eastern possessions.


GOOD BYE!
TAT-TA-TOOTS.

13

THE END.

HULLO DEAR. I LIKE BEING X-RAYED AFTER ALL
GOOD JOB. YOU DO, YOU'LL BE BACK SOON – WITH A FRACTURE.

14

Malaria is one of the commonest diseases, and there are many references to it in the Sign of Four. Jonathan Small described his life in the Andaman Islands: " Twenty long years in that fever-ridden swamp, all day at work under the mangrove tree, all night chained up in the filthy convict huts, bitten by mosquitoes, racked with ague . . . that is how I earned the Agra treasure " —as that was in 1888, he was quick to adopt Manson's six-year-old hypothesis that malaria was caused by the bite of the mosquito before its formal proof by Ross in 1898. Watson also realised that attacks rarely continued for more than a year or two after returning to England, unless their was a reservoir for re-infection, such as a large spleen, for we read that Major Sholto, of the Indian Army, had suffered for years from an enlarged spleen which was obviously malarial and accompanied by recurrences calling for treatment, because he describes the chaplet of pearls as on his dressing table by the quinine bottle (The Sign of Four).

One of the prisoners on the ill-fated voyage of the *Gloria Scott* was in bed with jaundice, and, considering the rats and the conditions likely to have prevailed on a convict ship during the Crimean War (1854–56), it is tempting to guess that this was a case of spirochætosis ictero-hæmorrhagica, though the cause was not discovered till many years later (1915). Though this is a most infectious form of jaundice, there would have hardly been time for other cases to develop for the ship was blown up shortly afterwards.

Roger Baskerville died from yellow fever in 1876 in Central America, and Mrs. Hebron's first husband from the same disease in Atlanta; most likely the Atlanta referred to was in Georgia, for, though it is rather high up and not on the sea coast, it would bring both sites into the yellow fever belt, and Mr. Hebron may have acquired the disease on a visit to the sea coast and travelled home during the incubation period; his death must have been about 1880. It was about 1900–1902 that Lazear and Reed proved its conveyance by an infected brindled mosquito, and that Gorgas made Havana safe by his systematic measures for the destruction of this mosquito, the high death rate which had been present for 150 years disappearing almost completely. Lazear died of the disease, and as we at Guy's know only too well from the death of Adrian Stokes, it has always been a dangerous one for doctors. The terrible mortality of yellow fever had long made it of interest even to non-medical authors, for in " Vanity Fair," dealing with the period after the Napoleonic War, Thackeray sent the notorious Rawdon Crawley to be Governor of the Coventry Islands, whence he was not expected to return. Surely this must be the origin of " sending to Coventry." an expression which has always seemed puzzling. A more recent episode would have brought it again before the notice of the Public, for in January, 1885, the *Iolanthe* had arrived in the Tyne from West Africa; six of the crew had died at sea from yellow fever and the mate and a boy were the only ones left on the ship, the captain and the other survivors of the crew of seventeen having deserted at Havre.

Finally there is the description of the leper hospital in South Africa. Corporal Emsworth had been wounded in the shoulder and managed to ride some way till he fainted and fell from his horse. He managed to crawl to a house and put himself in an empty bed, but, to his horror next morning, found he was in a leper colony which had been in disorder because it had been partly evacuated during the fighting. The description of the lepers with their deformed limbs is characteristic of the late stages of leprosy. But the rest of the story, though possible, is certainly unlikely; we cannot in any way blame Watson for this, for he was not present and even the account of the story was written by Holmes. But one does feel inclined to blame Dr. Kent for being willing to diagnose such a serious condition as leprosy without better evidence, especially as Emsworth had only slept one night in the leper colony; like most people who are too ready to make a diagnosis on insufficient brounds, he was not at all willing to have his diagnosis questioned. The specialist whom Holmes brought realised at once that it was icthyosis; possibly ichthyosis histrix might have some very superficial resemblance to leprosy, but sclerodermia would have been more likely to be mistaken for leprosy and would have been more likely to follow the shock of sleeping in the leper colony and the fear that he might have developed leprosy. Probably Holmes got muddled about what the specialist really said, as laymen often do; and here is another example of the many inaccuracies which would have been found had Dr. Watson not edited the stories.

(To be continued)

Correspondence

Dr. G. B. Dowling

SIR,—At a meeting of the "Combined Round" on January 26th, Dr. Dowling was the guest of honour. I was unexpectedly asked at the last moment to introduce him, and this I did most inadequately. Although later Dr. Forman clearly pointed out the startling effects of the introduction of calciferol in the treatment of lupus vulgaris by Dr. Dowling and Dr. Prosser Thomas in this country and Dr. Charpy in France, I wish, through the *Gazette*, to address my own tribute to a wider circle.

It is given to few to abolish almost in an instant by some simple discovery a complicated, tedious, and expensive system of treatment, evolved gradually over many years. Yet this is what Dr. Dowling and Dr. Charpy have done. It was a discovery based on logical deduction and not, as so many important scientific discoveries have been, on pure accident. Dr. Dowling argued that, since the common factor in the treatment of lupus vulgaris by ultra-violet light and cod liver oil or similar preparations was calciferol, why not try the effect of giving it alone in its pure form? The results, as all the dermatological world knows, were dramatic. A distinguished American dermatologist rightly said that this was one of the most important advances in dermatological therapy that had been achieved for many years past.

To give but one example of its value—some years ago an ear, nose and throat surgeon who is one of the kindest and most conscientious of men, brought me in despair from time to time a few of those distressing cases in which lupus vulgaris had invaded the mucous membranes of the mouth and upper respiratory tract. I could give him little or no help.

When Dr. Dowling and Dr. Prosser Thomas first showed the results of their treatment, I immediately put my friend in touch with Dr. Dowling. Writing to me later about one of these cases, my friend said that calciferol had achieved more in a few weeks than all the treatment she had had during the previous twenty years, and that the patient had become transformed physically and mentally.

Dr. Dowling has never claimed more for this method of treatment than it is actually able to accomplish, but, in spite of its limitations, it represents an advance of the first magnitude.

Another debt we owe him is that he has clarified the confusion that existed in the distinction between the various types of sclerodermia and dermatomyositis.

Yours, etc.,

H. W. BARBER.

7, Devonshire Place, W.1.

Passim

SIR,—I read your Passim in the last number of the Guy's *Gazette* with interest, but in case any misapprehension should result I would state that your reference to the present attitude of those in authority to the "District," is far from the truth. Everyone from the Dean downwards is very much alive to the value of the district, not only from the point of view of training in obstetrics, but also from the wider one of enabling a student to meet patients in their own homes, his first introduction to general practice and all that it implies. For some time past every effort has been made, not only to preserve the district but if and when possible to enlarge it.

Yours, etc.,

J. B. BLAIKLEY.

Department of Obstetrics and Gynæcology,
Guy's Hospital,
London Bridge, S.E.1.

Blind Welfare Services

SIR,—May we, as administrators respectively of St. Dunstan's and the National Institute for the Blind, draw the attention of those of your readers who may be asked for advice by patients losing their sight, to the proper course newly blinded people should follow if they wish to take full advantage of the Blind Welfare Services?

If a person's loss of sight has been caused or aggravated by war service (including civil defence), he or she should get in touch with St. Dunstan's, 191, Marylebone Road, London, N.W.1, which is responsible for such cases.

Responsibility for all those whose loss of sight is not attributable to war service, that is, the civilian blind, is borne by the Local Authorities and the Local Voluntary Agencies for the Blind, in co-operation with the National Institute for the Blind. Newly blinded civilians should therefore get in touch with the local Blind Welfare Authority or, should there be any doubt as to the identity of that body, with the National Institute for the Blind, 224, Great Portland Street, W.1, which gladly provides applicants with any information or advice they may require.

Yours, etc., W. ASKEW,
Secretary, St. Dunstan's.
J. C. COLLIGAN,
Secretary-General,
National Institute for the Blind.

224–6–8, Great Portland Street,
London, W.1.

Guy's Hospital Clubs' Union

SIR,—At the meeting of the Clubs' Union Council on the 19th January, 1951, a report was received from the Sub-Committee investigating students' representation on the Clubs' Union Council. In accordance with Rule 23 of the Clubs' Union, may I use your column to publish the recommendations of the Council? Before these recommendations can be adopted a two-thirds majority vote of the members present and voting at the next Clubs' Union Council meeting of the 27th April, 1951, will be necessary.

The proposed alterations are as follows:—

It was proposed that Rule 3 of the Clubs' Union should read . . . and twelve student representatives to be elected annually in October in the following manner . . . instead of . . . and twelve representatives of the students . . .

That Rule 3, Para. (iv), should read " Six to be elected from among the honorary secretaries of the other athletic clubs . . .

That Rule 3, Para. (vi), should read, " One to be elected from among the Honorary Secretaries of the non-athletic clubs. The Secretary of the Dental Society shall convene a meeting of secretaries of non-athletic clubs and a student representative of the Physical Society who shall form an electoral body."

Yours, etc.,
P. G. LARGE,
Hon. Secretary.

Yeoman Warders B.C.

We have been asked by the Secretary of the Students' Union to publish the enclosed most cordial invitation received by him from Yeoman Warders Bowls Club of the Tower of London. Will anyone interested write to the Students' Union so that this excellent annual fixture may be restarted this year.

SIR,—We are now arranging our bowling fixtures for this season. " Guy's Hospital " used to play us quite a lot before the last war, on our ground in the Tower. I don't see why our old happy associations could not be renewed. We play Wednesdays and Fridays. I have pleasure in suggesting the following dates; we will, as before, find you the bowls to play with: Friday, 6th July, 2 Rinks (8 players), 6.45 p.m., and again, Wednesday, 29th August, 8 players, same time. Your non-playing friends will be very welcome (ceremony of the Keys, etc.). Hoping to see plenty of you here, merry and bright. (Rubber shoes for players will be necessary). Will you please confirm these dates.

Yours, etc.,
C. W. SANDERSON,
Honorary Secretary.

Cradle Tower,
H.M. Tower of London.

Guy's Hospital Dental School

ANNUAL CLINICAL MEETING

PROGRAMME—1951

Morning Session (10 a.m.—12 noon).

THEATRES.

Theatre No. 3 (10 a.m.—11 a.m.)

Extractions and Alveolectomy	Mr. H. H. Kenshole.
Anæsthetist:	Dr. D. M. Carnegie.
(11 a.m.—12 noon) Remodelling of Mandible grossly enlarged by Osteitis Fibrosa	Mr. Patrick Clarkson
Anæsthetist:	Dr. A. M. Hutton.

Theatre No. 4 (10 a.m.)

Operation for Cleft Palate..	Mr. N. L. Eckhoff
Anæsthetist:	Dr. W. S. McConnell

DENTAL DEPARTMENT

Ground Floor

X-RAY DEPARTMENT

Exhibits of Radiographs	Dr. F. L. Ingram and Miss Arnold, Senior Radiographer

DEPARTMENT OF PREVENTIVE DENTISTRY

Bacteriological exhibits	Mr. A. Bulleid and Mr. C. W. T. Shuttleworth
Exhibition of colour transparencies	Mr. R. D. Emslie Mr. A. A. W. Fooks Mr. B. W. Pett
Clinical Demonstration—Gingivectomy	
Demonstration of Clinical Cases	
Methods of Caries Control	

First Floor

DENTURE ROOM AND PROSTHETICS LABORATORY

Clinical Cases	Professor H. R. Fenn
Compo-Zelex Impressions	Mr. M. Malleson
Plaster Impressions	Mr. R. D. Gain
The Peripheral Design of Full Dentures	Mr. A. Rand
Exhibit of Students' Work	

HISTOLOGY LABORATORY

The Nerve Impulse	Mr. D. J. Anderson and Dr. J. N. Hunt
Use of Colour Photography in the teaching of Histology	Mr. Dudley, of the Dental Histology Laboratory

DEPARTMENT OF DENTAL MEDICINE

Pathological Specimens and Sections	Professor M. A. Rushton
Organic constituents of Dentine	Mr. M. V. Stack

DENTAL PHOTOGRAPHIC DEPARTMENT

Exhibition of Colour Transparencies and Monochrome Prints of Clinical and Technical interest ..	Mr. A. D. Robinson and Mrs. Small, Photographer

Second Floor

CONSERVATION ROOM

Operative Dental Surgery..	Professor W. E. Herbert (in his room)
Root Canal Therapy	Mr. D. Waller
Amalgam Restorations	Mr. D. M. Griffith
Inlays by the Indirect Method	Mr. K. Sunaway
The use of the Self-polymerising Resins in Conservative Dentistry	Mr. J. W. McLean

PRE-CLINICAL DEPARTMENT

Exhibition of Students' Work	
Copper Plated Dies	Mr. A. H. R. Rowe

CLINICAL ROOM

Minor Oral Surgery under Local Anæsthesia	Mr. R. O. Holland

DEMONSTRATION ROOM, No. 1

An Ordinary Morning Clinic	Mr. G. B. Pritchard

DEMONSTRATION ROOM, No. 2

Class IV Restorations	Mr. A. D. Robinson

CHILDREN'S DEPARTMENT

Orthodontic Cases under Treatment will be shown throughout the day by:
Mr. R. Ernest Rix, Mr. K. E. Pringle, Mr. J. Tulley, Mr. Howell Richards, Mr. M. A. Kettle and the Orthodontic Assistants.

Construction of Orthodontic Bands	Mr. Howell Richards
The Applied Anatomy of Orthodontics	Mr. J. Tulley
Early Treatment of Pre-normal Occlusion	Mr. R. Ernest Rix
Upper Respiratory Research Unit	Mr. E. Gwynne Evans, assisted by Mr. J. Tulley

AFTERNOON SESSION (2 p.m.—4 p.m.)

THEATRE No. 3 at 2 p.m.

To Demonstrate an External Approach to the Mandible for Cyst or Tumour	Mr. S. H. Wass
Anæsthetist:	Dr. T. A. B. Harris

Out-Patient Department

GENERAL ANÆSTHETIC EXTRACTION ROOM

Operations under Nitrous Oxide Anæsthesia	Mr. Allan R. Thompson
Anæsthetist:	Dr. W. S. McConnell

DENTAL DEPARTMENT

Ground Floor

X-RAY DEPARTMENT

Exhibit of Radiographs	Dr. F. L. Ingram and Miss Arnold, Senior Radiographer

DEPARTMENT OF PREVENTIVE DENTISTRY

Bacteriological Exhibits	Mr. A. Bulleid and Mr. C. W. T. Shuttleworth
Exhibition of colour transparencies	Mr. R. D. Emslie Mr. A. A. W. Fooks Mr. B. W. Pett
Clinical Demonstration—Gingivectomy	
Demonstration of Clinical Cases	
Methods of Caries Control	

First Floor

DENTURE ROOM AND PROSTHETICS LABORATORY

Zinc Oxide Paste Impressions	Mr. P. W. Morris
Spoon Dentures	Mr. R. D. W. Stileman
The Vertical Height	Mr. G. B. Elphicke

HISTOLOGY LABORATORY

The Nerve Impulse	Mr. D. J. Anderson and Dr. J. N. Hunt
Use of Colour Photography in the teaching of Histology	Mr. Dudley of the Dental Histology Laboratory

DEPARTMENT OF DENTAL MEDICINE

Pathological Specimens and Sections	Professor M. A. Rushton
Organic Constituents of Dentine	Mr. M. V. Stack

DENTAL PHOTOGRAPHIC DEPARTMENT

Exhibition of Colour Transparencies and Monochrome Prints of Clinical and Technical interest	Mr. A. D. Robinson and Mrs. Small, Photographer

Second Floor

Clinical cases of interest will be shown by members of the Dental and Surgical Staff.

CONSERVATION ROOM

Jacket Crown Preparation	Mr. J. G. Hancock
Some Chairside Accessories	Mr. R. J. Hart
Irreversible Hydrocolloid Impressions for Indirect Inlays	Mr. A. A. Robinson
The use of the Self-polymerising Resins in Conservative Dentistry	Mr. J. W. McLean

PRE-CLINICAL DEPARTMENT

Exhibition of Students' Work	
Copper Plated Dies	Mr. A. H. R. Rowe

DEMONSTRATION ROOM No. 1

Minor Oral Surgery under Local Anæsthesia	Mr. K. Hooper

DEMONSTRATION ROOM No. 2

Surgical Methods for Difficult Extractions	Mr. C. I. Hagger

CLINICAL ROOM

A Modified Post Crown Technique	Mr. J. W. Mansie

CHILDREN'S DEPARTMENT

Orthodontic Treatment for Cases of Cleft Palate	Mr. K. E. Pringle and Mr. M. A. Kettle
The use of Film Strip for the Serial Presentation of Orthodontic Material	Mr. K. E. Pringle

Tea will be served on the First Floor of the Dental Department at 3.45 p.m.

Reviews

What is Hypnosis. By ANDREW SALTER. Athenæum Press. *Price* 8*s*. 6*d*.

The theme of this little book, that hypnosis is essentially the production of conditioned reflexes, together with the striking experimental evidence adduced in support of it, is both interesting and important. It is the more regrettable that the book is so badly written as to be in parts almost unreadable. As well as many of the more tiresome and ugly effects of slipshod English and tendentious dogmatism, all too frequently encountered in modern scientific writing, it includes a number of needless annoyances, such as numerical assessments of personality traits extended to meaningless decimals. Execrable in style, it is brief but not concise, compressed but lacking economy, and occasionally self-contradictory. It deserves to be read; but it ought to be readable.

D.S.-C.

A Companion to Manuals of Practical Anatomy. By E. B. JAMIESON. 7th Edition, 1950. Oxford Medical Publications. *Price* 18*s*.

The new 7th Edition of Jamieson's "Companion to Manuals of Practical Anatomy" conforms to the high standard set by the previous editions. There has been little change in substance since the last edition and no increase in bulk. A greater part of the text is put into "regional" form, although many of the structures of the body are described under their Systems. At the end of the book a compressed account of the Delevopment is given. The language is condensed and frequent use is made of abbreviations, so that its "readability" is somewhat impaired.

This synopsis of anatomy is a mine of information and should prove invaluable to the senior medical student and the Primary Fellowship candidate especially in the course of revision for examinations.

O.L.T.

Sport

ASSOCIATION FOOTBALL

Southern Amateur League

Guy's *v*. Old Lyonians

27th January, 1951

Away. Result—Lost 0—4

Guy's *v*. Croydon Athletic

At H.O.P. Result—Won 3—2

(*Friendly match*)

31st January, 1951

On a pitch made treacherous by a hard ground frost and against a reasonably strong team, Guy's played some attractive football and with a little steadier finishing by the forwards their winning margin would have been greater. The first half was very even but due to a defensive slip, when two Guy's defenders waited for each other to clear and allowed Thorby, a Croydon forward to nip in and score, the home side were a goal down at the interval. The best effort of this half was a grand shot from Leckie that struck the cross bar.

Early in the second half Guy's equalised when a long cross shot by Lipington was diverted by a Croydon back out of the goalkeeper's reach. Within the space of ten minutes Harris had scored two opportunist goals to put the Hospital 3–1 up. Shortly before the close Croydon scored a second when their winger beat Lyon with a cross shot. The end of an enjoyable game came with the score at 3–2.

Team: M. Lyon; M. Bishop, J. Wylie; D. Lipington, P. Southgate, A. Prince; A. Fearn, B. Cornhill, D. Harris, C. Leckie, D. Allan.

Guy's *v*. Ibis

At H.O.P. Result—Lost 2—5

3rd February, 1951

This was a game that on the trend of the play the Hospital should have won, but whereas the visitors relied on defence in depth the Hospital's was about as watertight as a colander. Individually the Guy's defenders played well up to standard but as a defensive unit it was completely ineffective.

Within twenty minutes Guy's were two goals down although having had an equal share of the game. However just before the interval this deficit was reduced when Harris ran on to a perfect through pass from Matthews and made no mistake with his shot.

After the interval Guy's attacked strongly and it looked as though they would equalise but this was not to be for an this attack found itself in numerical superiority and the score became 3–1.

This was once again reduced when Matthews took a free kick and Oldfield running on to the ball had no difficulty in putting it into the net.

Once again Guy's swarmed into the attack and Fearn hit the crossbar with a hard shot and Oldfield just failed to put the rebound into the net. Another shot by Fearn entered the net but the referee gave an offside decision against Oldfield for standing by the goal post.

With Guy's having too many men in the attack the inevitable happened, a quick breakaway and Ibis scored again.

Just on time they added a fifth when three Guy's defenders rushed across to tackle the Ibis left winger, leaving their right winger completely unmarked.

Team: M. Lyon; D. Allan J. Wylie; D. Matthews, P. Southgate, A. Swift; A. Fearn, C. Leckie, D. Harris, N. Crabtree, D. Oldfield.

Hospital Information, etc.

SOCIAL SECTION.

The Annual Hockey Club Dance will be held on **Thursday, 22nd February, 1951,** at Bush House, Strand. Double tickets may be obtained from club representatives price £1:1:0. Evening dress optional.

PASS LIST

CONJOINT BOARD

M.R.C.S., L.R.C.P.

Final Examination

January, 1951

Pathology

K. B. Bender
*J. W. Bradbeer
N. P. Bronsdon
*P. H. Gorodi
*A. M. Kingon
P. F. P. Lansdown
M. M. Levene
M. M. Lubel
J. U. MacWilliam
D. B. Murray
A. Ross
D. L. Rugg-Easey
*J. A. J. Smith
C. H. Wilkinson

Medicine

K. B. Bender
S. K. Bosher
*J. W. Bradbeer
A. J. Bridge
A. C. Campbell
R. J. O. Catlin
D. J. Cliffe
A. Ferrari
J. W. Goodfellow
*P. H. Gorodi
P. D. Harvey
*J. Hurst
*J. V. Jeffs
J. C. Jellyman
*J. C. C. Kendall
*A. M. Kingon
W. H. McKendrick
*K. G. P. Mackenzie
I. H. Maine
E. J. Masters
*P. O'Gorman
W. J. Pryn
*P. J. Rademan
J. R. Robinson
A. Ross
D. L. Rugg-Easey
G. C. Saint
H. Schapira
M. A. Sorefan
*J. M. Stoner
E. P. W. Tatford
*J. A. Thornton
*P. J. Wardill
*L. Wollner

Surgery

*D. B. Amos
*J. H. Bailey
T. G. L. Bellis
M. J. Craft
J. C. Gazet
H. Gold
*H. V. Hoyle
*W. V. James
*J. C. C. Kendall
*A. M. Kingon
*P. J. Koblenzer
P. M. J. O'Brien
*P. O'Gorman
J. O. Ojukwu
J. N. Pachmayr
S. A. C. Paget
J. Palmer
P. L. Pelmear
S. H. Richards
E. D. Sonnenfeld
*D. J. Stoker
*J. M. Stoner
W. M. E. Tweed
A. H. Walker
R. A. J. Webb
*L. Wollner
P. A. Zorab

Midwifery

W. A. J. Bufton
H. W. S. Francis
P. S. Greaves
L. Yoke Htyan
T. D. Kellaway
M. M. Levene
D. T. Lovell
N. M. Midgley
J. O. Ojukwu
S. A. C. Paget
T. G. Pugh
E. J. Rolls
A. Shotts

* Have completed the examination

UNIVERSITY OF LONDON

M.D.

December, 1950

BRANCH I. (*Medicine*)

A. G. Bearn
A. E. Doyle
C. J. Earl
T. R. L. Finnegan
C. L. Joiner
J. Luder
L. G. Scott
I. Yentis

BRANCH III. (*Psychological Medicine*)

A. J. P. Oldham

BRANCH IV.

(*Midwifery and Diseases of Women*)

D. W. James

Special First Examination for Medical Degrees December, 1950

Pass

M. L. A. B .Bancilhon
N. D. Gripper
G. W. M. Kremer
A. M. Lush
Moira A. McLellan
G. B. Middle
E. D. A. Orsmond
P. W. Pollock
D. Scott

The following External Candidates have completed First Medical

C. P. Briggs
P. L. Vaughan

The following Higher School Candidates have qualified for exemption from the First Medical

C. J. Booth
R. K. Knight
R. D. Sandfield
N. P. Thomas

Examination for the Academic Postgraduate Certificate in Public Health

December, 1950

G. M. Curtois
L. E. A. Dearberg
D. H. MacKay

CHANGES OF ADDRESS

R. D. Emslie, F.D.S., R.C.S., B.D.S., "Bothkennar," Bouverie Road, Chipstead, Surrey. Tel.: Downland 3151.

Miss Rita M. Saldanha, C/O Medical Students' Club, Howard Gardens, Cardiff, Glam.

BIRTHS

BREWIN.—On January 19th, 1951, at Guy's Hospital, to Doreen, wife of T. B. Brewin, M.B., B.S.—a sister for David (Elizabeth Anne).

BURT.—On January 30th, 1951, at Longacre Nursing Home, West Runton, Norfolk, to Mary (née White) wife of Capt. J. R. Burt, R.A.D.C.—God's gift of a son (Michael John).

WALWYN-JONES.—On January 23rd, 1951, to Margaret (née Pemberton) wife of Dr. E. D. Walwyn-Jones, 88 Sussex Gardens, W.2—a daughter.

MARRIAGES

EDWARDS—HENRY.—On Saturday, January 20th, 1951, at St. Nicholas Church, Hornsea, Derick H. Edwards to Pauline W. Henry, S.R.N.

NICHOLSON—CLARK.—On December 9th, 1950, at All Saints' Church, Marlow, Nigel Geoffrey Nicholson, M.B., B.S., to Dorothy Christine Clark, S.R.N.

SHEERAN — MULLIGAN.— On Tuesday, February 6th, 1951, in London, William M. Sheeran, L.D.S., R.C.S., to Ann Mary Mulligan, S.R.N.

WOLLNER — COLQUHOUN.—On January 20th, 1951, at Wallingford, Leopold Wollner, M. R. C. S., L. R. C. P., to Sylvia M. Colquhoun.

DEATHS

HAYES.—On January 11th, 1951, Reginal Hewlett Hayes, M.R.C.S., L.R.C.P., of The Drive, Hove, Sussex.

Eds {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1633 *24th February* 1951 *Ninepence*

PASSIM

OUR journal has many services to perform. It must record the day-to-day happenings in the hospital, bring articles of interest to its readers and act as a medium for comment and criticism. Not least, however, of its functions is to provide a link between the thousands of its readers within the hospital and the three thousand remote from it. Of these latter many are abroad and we are glad occasionally to act as messenger between Guy's and them.

Bound by the ordinary daily tasks in our own towns or in the hospital we perhaps think too seldom of the many more adventurous Guy's men and women overseas. For separated though they may be from Guy's by many thousands of miles their link with home is not less strong for that. At this moment there are Guy's men in Korea, in Burma, in Malaya, in every part of the Commonwealth and Empire, in America and in Africa. You may meet them from Chungking to Ottawa, from Johannesburg to Aukland, from Cape Horn to Scapa Flow, and wherever they are we like to think that the standard of medicine they practice and the good sound sense they use are as high and higher than all their colleagues or competitors.

About this time, and especially this year, some of them may be preparing to make a summer visit home. It is our hope that those who do will visit Guy's and we are sure that in saying this we speak for all the present Guy's generation. It has been suggested that the Biennial Dinner might become an annual one or that there should be an extra one this year. We feel however that more important than this is to look after any Guy's man from abroad, or for that matter, from home, who does not happen to have met any of their old friends. It would be a pleasant custom if all old Guy's men automatically became guests in the College at meals and if someone who is regularly present there would act, if necessary, as host.

* * *

We have been asked to remind Guy's men who have sons or daughters who wish to apply for admission to the School in October, 1952, that applications for admission to the Medical School at that date must be sent to the Dean before 31st July, 1951. Applications for admission to the Dental School in October, 1952, should be sent to the Dental Sub-Dean between 1st July and 31st December, 1951.

* * *

Last week the Medical School received a bill from a famous photographic firm addressed to " The Dept. of Mythology, Guy's Hospital." All the Departments were curiously reluctant to admit to the bill being theirs and we shall leave you to guess its true destination.

* * *

We record with great regret the death in Nuffield House on February 5th, 1951, of Wing Commander H. M. Stanley Turner. He was a frequent contributor to the *Gazette* under such nom de plume as " Uncle Harry " and " El Hakim Pasha."

* * *

THIRTY CLUB

The Twenty-second Dinner of the Thirty Club will be held on Friday, June 1st, 1951. Details will be sent to members later and they are asked to make a note of the date.

Boxing

The Pavy Gymnasium was originally founded by the late Frederick William Pavy, M.D., LL.D., F.R.S., in 1890. At first it occupied a semi-underground site in the quadrangle of the Residential College, the old premises, refurnished, now forming part of the Cafeteria. Only as recently as 1940, after the College had been damaged severely by enemy action, was the new Gymnasium opened on the site adjacent to the Tosh Clinic.

The sum of £2,000 was bequeathed by Dr. Pavy upon his death in 1911 as an endowment in favour of the Gymnasium which he had set up. Unfortunately the income derived therefrom is today inadequate to meet all the expenses. Rather than call upon the Clubs' Union funds which, themselves, are seldom sufficient for the various demands made upon them, the Boxing Club has taken the initiative and organised annual tournaments as a means of improving the gymnasium finances. Under the circumstances then, it was a great pity from a commercial standpoint and, in addition, little consolation or gratitude to the organisers who had done so much work, that the Tournament staged on Tuesday, 13th February, at Seymour Hall, commanded so little support. At all events, those spectators who did attend enjoyed a well-managed display of very good sport.

A. Atkinson, for example, boxed in very fine style to win his bout against P.C. Kerr of the Metropolitan Police in the second round, of Pte. S. Bonnici, the Army Southern Command Champion, too little was seen in his special contest with M. Dowling of the Lynn A.C. for the fight was stopped when the latter sustained a cut over the eye in the first round—and adjourned to St. Mary's, nearby, for treatment! Gunner L. Bater, the 1951 International, and J. Fests of West Ham A.B.C., the Army champion of 1949, were masters of in-fighting and science in the ring. Among the Guy's men, the purposeful hitting of W. Watson who accounted for P.C. Beattie of the Police in the first round and the startling and dramatically effective onslaught launched by B. Crewin against P.C. Petire, remain in the memory.

Although, when the final accounts are closed, the Pavy Gymnasium may have failed to achieve the financial benefit it deserved, none-the-less a fine show was put on for all those interested and may next year's efforts be better rewarded.

[*A formal report of this Tournament appears in the Sport columns of this issue.*]

ACADEMIC

February		Exhibition. Surgical Department. "The Surgical Treatment of Pain."
26th	1.00.	Dr. Donald Hunter, M.D., F.R.C.P., Director of Department for Research in Industrial Medicine, London Hospital. Clinical Lecture. "Aromatic and Aliphatic Compounds."
27th	1.00.	Dr. Donald Hunter, M.D., F.R.C.P., Director of Department for Research in Industrial Medicine, London Hospital. Clinical Lecture. "Diseases of the Lungs due to Dust."
	5.15.	Dental Society. Mr. A. Wood. "Dental Treatment of the Hæmophiliac."
March		Exhibition. Surgical Department. "Rectal Bleeding."
1st	1.00.	Mr. Eckhoff. Clinical Lecture. "Foot Problems and Plastic Surgery."
	4.30.	X-Ray Meeting. Gordon Museum.
2nd	1.00.	Dr. Grant. Clinical Lecture. "Pulmonary Fat Embolism."
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
5th	1.00.	Mr. Blaikley. Clinical Lecture.
	5.00.	Surgical Department. Film demonstrating the technique of Thyroidectomy. Clinical Theatre.
6th	1.00	Dr. Cameron. Clinical Lecture. "History of Medicine,"—*continued.*
7th	4.45	Science Club. Professor G. Payling Wright "Local Tetanus."
8th	1.00.	Mr. Massie. Clinical Lecture.
	4.30.	X-Ray Meeting. Gordon Museum.
9th	12.00.	Professor M. A. Rushton. Dental Theatre.
	1.00.	Dr. Hampson. Clinical Lecture.
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
10th	10.00.	Mr. A. H. M. Siddons, St. George's Hospital. Surgical Departmental Round. Clinical Theatre.
12th	1.00.	Mr. Brock. Clinical Lecture. "Bronchial Carcinoma."

SPORT

March	
3rd	Rugby 1st XV *v.* London Welsh. (H.O.P.)
	Rugby "A" XV *v.* London Welsh "A". (Herne Hill.)
10th	Rugby 1st XV *v.* Old Alleynians. (H.O.P.)
	Rugby "A" XV *v.* Gidea Park "A". (Gidea Park.)

" The Bowels "

By RALPH KAUNTZE, M.D., F.R.C.P.

A Clinical Lecture delivered in Guy's Hospital Medical School on 9th February, 1951.

LADIES AND GENTLEMEN,—Although the accuracy of Sir Francis Drake's reply, to the information that the Armada was in sight, " My bowels come first," may be open to doubt, none the less it indicates a true perspective in regard to the importance of regular defæcation and provides an antedote to the insidious propaganda of the advertisement pages of magazines and the posters in tube trains, which adjure one to inner cleanliness through purgation. To-day I shall consider constipation, the ætiology and thence the treatment of the ailment.

CONSTIPATION

Constipation was defined by Sir Arthur Hurst as that condition, in which no part of the residue of a meal was passed within 48 hours. It is in fact a condition difficult to define, for whereas action of the bowels three times in the day may be usual in one individual, in another defæcation may take place only every second day, and yet in both instances be associated with complete health. It is perhaps some expression of the individuality. I remember meeting the Officer Commanding a general hospital in Italy, leaving the latrine at dawn and commiserating with him, on being like myself a victim of the all-prevalent enteritis, which so frequently leads to disparagement of the Italian way of life, only to be told that he would never suffer his bowels to control his life and for this reason made a point of evacuation at the most unusual and varied hours. Samson Wright retails the following from the Talmud ; a scholar was complimented on his healthy appearance in these words, " Your face is like that of pig rearers and usurers." To which he made reply, " On my faith both occupations are forbidden me : but there are 24 privies from my lodging place to the house of study and whenever I go there, I test myself in all of them." That there is considerable variation in the frequency of defæcation must therefore be accepted.

GUT MOVEMENTS AND THE PASSAGE OF CHYME

The movements of the gut have been studied with the bismuth and barium meals, and although the conditions obtaining with these are not perhaps such as occur with an ordinary meal they give one certain data. The fasting stomach exhibits rhythmic tone, when food enters the stomach the fundus continues to show tonicity, but high up in the body of the stomach peristalsis begins, waves succeeding each other at 20-second intervals. After five minutes or so the pylorus relaxes as peristalsis passes over it and a small quantity of gastric contents is ejected into the duodenal bulb. When the stomach is partially empty the pylorus relaxes between waves, but it seems probable that any excess of acid contents in the duodenal cap causes closure of the pylorus. The fractional test meal shows the normal stomach to be empty in two to two and a half hours and retention of barium within the stomach for more than six hours means delay. The acid chyme remains in the duodenal cap until neutralization has taken place. In the small intestine the movements are of two types, namely, peristalsis and segmentation. Peristalsis is brought about by contraction above the point stimulated and relaxation below. It is dependent on the intrinsic nerve plexus but independent for its origin on extrinsic nerves. Vagal stimulation causes increased tone. Each wave rapidly moves the chyme a few inches onwards. Segmentation is an expression in smooth muscle of the stretch reflex, distention alternating with contraction, the cycles occur at about 10-second intervals ; they cause mixing and allow digestion and absorption to take place, and in addition aid the return of lymph and blood from the bowel itself. The ileocæcal valve is reached three and a half hours after the food has left the stomach. Although the valve relaxes with peristalsis, between meals peristalsis is not marked in the lower ileum and the chyme remains in these reaches up to an hour, during which final absorption of fatty and amino acids occurs. When further food enters the stomach the ileocæcal sphincter relaxes and peristalsis becoming vigorous rapidly ejects the contents of the lower ileum into the cæcum. Inflammation in the neighbourhood of the cæcum may be associated with a reversal of this reflex, whereby spasm of the pylorus is produced and dyspepsia results. Peristalsis does occur in the ascending colon, but it is so slow that it cannot be seen on fluoroscopy: however, films with an interval of a few minutes will show that the chyme has in fact moved on. Absorption of nutriment has taken place in the ileum; absorption of water, salt and glucose—if this latter has not already been absorbed—occurs in the ascending colon, and the liquid chyme is there converted to a pultacious material; further water is absorbed in the pelvic colon and solid fæces result. Some 350 cc. of chyme pass daily through the ileocæcal valve as measured by cæcostomy. Although the sphincter yields to barium at a pressure of 18 inches, regurgitation is unlikely in health. After food the contents of the proximal two thirds of the transverse colon are rapidly ejected into the left colon, reaching the sigmoid colon and remaining at the pelvi-rectal juncture, as a result of mass peristalsis dependent on the gastro-colic reflex. The pelvi-rectal juncture is an angulation causing a check to the further passage of fæces; with increasing distension of the sigmoid this impediment is overcome, the rectum fills with fæces and the desire to defæcate arises. In health the rectum is empty and it is only when the call to stool is ignored that the rectum remains constantly full. With the barium meal the cæcum is reached in 4½ hours, the hepatic flexure at 6 hours, the iliac colon at 12 hours and the pelvic colon at 18 hours; these are average times and there is very considerable individual variation.

FACTORS IN CONSTIPATION

In constipation therefore, there are three main factors, the quality and quantity of the stools, the muscular tone of the gut and the patency of the passages. The solid portion of the stool consists of dead bacteria, desquamated mucosa and unabsorbed residue, particularly cellulose. Deficient intake of food, a low residue diet and particularly defective intake of fluid or excessive fluid loss, will be associated with constipation, due to diminished residue or scyballous stools. This defective fluid intake is a not inconsiderable factor in health, particularly in women; it is notable that the sweating of fever is accompanied by constipation.

It is doubtful whether primary impairment of intestinal muscle tone ever occurs. In the hypothyroidism of the cretin or in myxœdema, constipation is usual and it is suggested that this results from defective muscle tone. If this is so, then the condition should respond readily to thyroid extract; however, it has been my experience that the constipation of myxœdema is usually a dyschezia. The heavy metals are excreted by the colon and lead poisoning is notorious for both colic and constipation, presumably excessive tonus and disordered peristalsis bring this to pass, a sort of slow colonic fibrillation. Peritoneal infection or painful stimuli may inhibit normal peristalsis and constipation results. In certain individuals mental depression is reflected in the bowels. Obstruction in the small bowel is usually attended by diarrhœa; but narrowing of the intestinal lumen from the cæcum downwards will produce costiveness from delay in transit; this may be from external pressure, as from the pregnant uterus, fibrous bands, ovarian tumours and the like, from narrowing of the bowel wall as in the strictures of tuberculous infection, Crohn's disease or ulcerative colitis, and of outstanding importance neoplasm, usually carcinoma. As fifty per cent. of large bowel carcinoma are located in the pelvic colon constipation is an early symptom of the condition. Diverticulitis will have a similar effect. Obstruction within the lumen may occur from fæcal impaction, which may be met with at any age but is more common at the extremes of life. The obstruction may be wholly rectal as with the ball valve resulting from melæna or a barium meal in the elderly, alternatively the accumulation may present as a mass in the pelvic colon. The following case history illustrates some of the tribulations at times entailed in the diagnosis. Before the late war I was asked to see a girl of nine years, an only child and a dollar heiress; perhaps on account of which, much attention had been directed to her bowels, for her nurse kept a daily record of evacuation and the diet was the subject of much study. During the morning in question the child had been seized by lower abdominal colic occurring at intervals of fifteen minutes or so and had been unable to pass her urine, although the bowels had been moved. I found a grossly distended bladder and an aura of profound anxiety, and to the evident horror of her mother got the child out of bed and walked her round. Within a few minutes the bladder was emptied naturally and on re-examining the abdomen, I felt rather like Keats on reading Chapman's Homer or those who witnessed Haley's Comet on the birthday of Mark Twain, for there in the lower abdomen was a hard painless lump, the size of a tangerine. It was moveable laterally and upwards as far as the umbilicus but no further. I was not able to perform a rectal examination, for two years previously at Johns Hopkins this simple manœuvre had, it was averred, caused great mental " trawma." I contented myself with a diagnosis of ovarian dermoid and suggested a surgical opinion. This we had and a consultant surgeon also, Sir M. S. After telephoning Johns Hopkins operation was decided upon. The child was duly sent to a nursing home and I prescribed for her paraffin emulsion, at the same time I asked Lord M. D. if he would see her in the morning. Early the next day on examining the child I was horrified to find two satellite tumours, and on hurrying downstairs was in time to hear his lordship instructing Sir M. S. on fæcal impaction. I drank a cup of coffee which tasted very bitter and we walked upstairs ; Matron and five doctors, for the anæsthetist was also of the party. With a hand on the abdomen and a happy light in his eyes Lord M. D. beckoned towards Sir M. S. Downstairs impasse was reached, for the surgical view was that there was an ovarian tumour no matter what else. I suggested that the child should be examined under an anæsthetic and eventually a fæcal disimpaction was performed with a silver spoon, whether this was crested or not I do not recall. There was no evidence of ovarian tumour. It is noteworthy that the bowels had been opened each day, it was, therefore a dyschezia in which there was retention with overflow.

DYSCHEZIA

Where there is no delay in transit through the colon and the fæces are retained at the pelvi-rectal juncture or in the rectum, the condition is named dyschezia. The former is present in Hirschprung's disease, due to defect in Auerbach's plexus, whereby a local segment of ileus is produced and proximal dilatation and hypertrophy occur : the treatment is removal of the segment in question, and the results from this are excellent. The latter condition of hold-up in the rectum is the most usual form of constipation, world-wide in distribution with particular incidence in the female. Distention of the rectum produces an immediate desire to defæcate, but if this is ignored, the stimulus rapidly passes off. Lesions of the spinal cord may interfere with the stimulus reaching consciousness or the memory of pain in the performance of defæcation or negativism in the child may suppress the conscious reception of the reflex. In primitive society each mass reflex, whereby the transverse colon is emptied into the sigmoid is followed by defæcation, but in civilised communities it is more usual for the act to take place once in the day, before or more usually after breakfast. The training of the infant is designed to the conditioning of this reflex, but it entails for its perpetuation constant attention, and failure to continue in the habit is rapidly attended by diminution of the force of the reflex itself. Painful conditions around the anus or damage to the levatore ani may interfere with evacuation.

From this it will be seen that the diagnosis of the cause of constipation rests upon consideration of the patient's diet, fluid intake and general health, the demonstration of an adequate pathway and the results of rectal examination.

AUTO-INTOXICATION FROM CONSTIPATION

Auto-intoxication has been much stressed as the cause of those symptoms so usually associated with constipation, namely headache, inattention, restlessness, irritability, depression, nausea, foul breath, furred tongue, impaired appetite and vague abdominal discomfort. Fæcal collections in the rectum may cause quite severe pain in the back, perineum and inner aspects of the thighs. Putrefaction of protein gives indol, skatol and phenol, but the presence of these in the blood is not necessarily increased in constipation. That absorption of " toxins " should occur from material which is near-petrified seems unlikely, yet where purgation is associated with fluid stools it is conceivable. The symptoms, however, are so rapidly relieved after evacuation, that actual chemical absorption producing the symptoms seems highly improbable. As Alvarez remarks " the drunk man is not rendered sober by removal of the whisky bottle." Furthermore, absorption of break-down products into the blood stream from the colon would not lead to symptoms unless the liver was concurrently diseased. Hurst has stated that distention of the rectum alone will produce symptoms identical to those of constipation. It seems, however, that neither the theories of rectal distention nor absorption of break-down products wholly fits the picture, for long continued constipation is at times present without any symptoms whatsoever; the costive record is 368 days, with trivial discomfort, except in the later stages when flatulence, distention and colic were present. It has furthermore been suggested that the symptoms result from the use of purgatives, and that purgation by hurrying the intestinal contents may allow the absorption of toxic products. It seems much more probable that the symptoms of constipation are the expression of psychoneurosis, together with the lifelong perusal of pernicious advertisements favouring one or another purgative.

TREATMENT

Treatment in the main will be for the dyschezia, but an adequate fluid intake and a certain amount of roughage are to be encouraged; in addition fruit juice and fresh fruit are of importance. If the bulk of the stools is still small, one of the preparations of agar agar may be taken twice a day. The main point is insistence on an unhurried regular attempt at daily evacuation; furthermore it is of the greatest importance that the lavatory accommodation should be adequate and æsthetically pleasing. Too frequently this important house-hold property is placed in some dank and dark room, surely a Calvinistic quirk. The introduction of central heating, books, tobacco and a comfortable seat, are all important. One does not insist on the plush seats assigned to royalty but there is no reason why comfort should not be studied. For the child it is important that support should be given to the feet. Whether Horace or the daily paper is reading of choice obviously matters not, the end justifies the means. Parsons and poets in particular have shown an ingenious interest in the privy. Introducing the water closet in 1556, at a time when the oubliette was in particular use, Sir John Harington described his discovery under the punning title of " A new discourse on a stale subject, called the metamorphosis of Ajax." The Rev. Moule's earth closet represents the appeal of agriculture, and was and perhaps still is, featured in books on public health.

The Romans favoured gregariousness at stool—I had some experience of this in the Western Desert, and although news and comment are so to say available from both flanks, it is an esoteric practice.

In the initial treatment of dyschezia the bowel should be emptied with an enema and for a week subsequently defæcation should be encouraged by the use of a simple suppository. In the great majority, re-establishment of the reflex will be attained. Yet in a few, in spite of the removal of painful deterrents such as fissures and prolapsed hæmorrhoids, function without purgatives appears impossible. In these cases use should be made of senna in the form of the pods, eight or so dissolved in cold water and the fluid drunk two or three hours later, on retiring. Senna has a direct effect on the colon and does not produce hurry in the small intestine. Diminishing the number of pods gradually may in a number be successful. There is, however, a residue of patients in whom it is impossible to regularise the bowels without aperients, and these should continue with agar agar and senna. Aloes, phenol-phthalein, sulphur and rhubarb are to be avoided.

THE ENEMA

" *Would they were clyster pipes for your sake* "—*Iago.*

Is there a place for the enema? The practice of giving enemata or clysters dates from the dynasty of the Pharoahs. Pliny suggested that the habit resulted from close observation of the ibis, which appears to inject water into its cloaca. In fact, the bird in this act is coating its beak with oil from the glands which lie in the vicinity. Herodotus recounts that the Egyptians were convinced that disease resulted from food consumed and states that on this basis rested their prediliction for enemata. The methods of administration are set out in some detail in the Ebers Papyrus, which dates from 1550 B.C. Hippocrates advised " an enema if the patient be strong and in the prime of life, but if he be weak a suppository should be administered, should the bowels be not well moved on their own accord." Asclepiades (124 B.C.) preferred enemata to purgatives in the treatment of constipation. However, it is to Celsus that credit or discredit must be assigned for the first nutrient enema. This early " cordon bleu " favoured honey, in addition he used water or sea water enemata to expunge the " stercoracious fœtor arising from the breath." To the fashionable women of Rome afflicted with dyspepsia and distention, there was the vomitorium or the enema, and as the latter was given with a hollow reed protruding from a leather flask, the operation was not always free from trauma. Both variety in content and method were present through the ages, but most bizarre among the former were the pepper enemata prescribed for himself by Avicenna, following eight of which he was seized, not unsurprisingly, by an epileptiform convulsion. Primitive tribes had used oral insufflation with a hollow bamboo, or alternatively a calabash. During the fifteenth century the enema syringe was invented, yet perfection was to come with Regnier de Graaf (1668, De Clysteribus), who devised a slender flexible tube whereby the enema could be self-administered. These flexible tubes were described as not being unlike the pipes used by the English for introducing tobacco fumes into the bowel. The French Court were firm adherents of the enema to a woman, and the costive Louis XI was not merely a convert himself but insisted on the practice being extended to his dogs. The Renaissance did more than spread simple book knowledge. It is recorded that Louis XIII received in one year not merely 212 enemata but 215 purgations and 47 venesections. It is a happy reflection that Richelieu himself did not escape.

From therapy to fashion and fanaticism and later the ridicule of the Victorians, the enema remains established in certain conditions. Fortunately the bone nozzle has been superseded by the rubber catheter.

There are, however, certain reflections with regard to enemata which are not without their amusing side. Cervantes's " Knight of the Sun," after being bound hand and foot was administered a clyster of snow water and sand, which, it is recorded, almost distracted him. The prevalence of lavage at the Court of Louis XIV is recorded in the Molière comedy " Le Malade Imaginaire," and the consort of the Sun King was at times given an enema whilst standing talking to her husband. In the 17th century the syringe, which was usually made of silver or copper, doubled its therapeutic role with that of fire extinguisher.

In my remarks on the enema I have drawn extensively on " The history of the enema with some notes on related procedures." By Friedwald and J. Morrison (1940), *Bull. Hist. Med.*, 8, 68a, 239.

Dental Out-Patient Department

Appointments for patients requiring Dental Specialist consultation or treatment in the Dental Department may be made by letter, personal application by the patient, or by telephone. HOP 3500 (Extensions 281–288).

Monday

Morning	Mr. Kenshole
Afternoon	Professor Rushton (Special cases only) Mr. Thompson Mr. Pringle (Children)

Tuesday

Morning	Mr. Pritchard Mr. Rix (Children)
Afternoon	Mr. Holland

Wednesday

Morning	Mr. Warner
Afternoon	Professor Herbert

Thursday

Morning	Mr. Bulleid Mr. Pringle (Children)
Afternoon	Mr. Thompson

Friday

Morning	Mr. Hooper
Afternoon	Mr. Holland

Saturday

Morning	Mr. Mansie

It is stressed that this service is for specialist requirements and not for routine conservative or extraction operations. Patients requiring these will continue to be seen in the normal Out-Patient service. In every case, the patient must produce a letter of introduction and any relevant records from the Practitioner.

"Baltimore and Boston"—a Diary

By SIR HENEAGE OGILVIE, K.B.E., M.Ch.

(Continued)

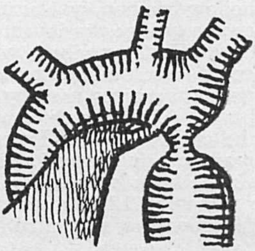
Sunday, 24th.

In the morning we had a three-hour round of the surgical wards with Ravitch, Bahnson and Kieffer. One specialty of Ravitch is the treatment of depressed sternum: he divides the xiphisternal junction, resects all the rib cartilages, and does a wedge osteotomy at the manubrial level, so that apparently the sternum is held forward by its top and is otherwise floating. It seems to work.

In the afternoon we went to a professional football match, Baltimore Colts *v.* Cleveland Browns. The Browns won easily. Cocktails with the publisher of the Baltimore Sun, and supper again with the Blalocks.

Monday, 25th.

Watched Blalock doing a coarctation of the aorta. Resection of 4th cartilage and long 3rd space incision. Rienhoff's rib spreader is a real man-size job, with a ratchet of $\frac{1}{4}$ inch steel carrying two teeth to the inch, and a good swivel handle: when you turn the handle something has to go, and it isn't the retractor. A careful dissection and a beautiful anastomosis. The case was difficult in that the coarctation was high and the left subclavian enormous, but easy in that the first aortic intercostal was a good inch beyond the stricture. The opening in the excised specimen was about $1\frac{1}{2}$ mm. in diameter.



Later Blalock did a pulmonary stenosis, dividing the valve through an incision in the right ventricle with Brock's Valvulotome, and dilating it with Brock's dilators. Before opening the pericardium he puts in 10 cc. of novocaine and lets it splash around. He also injects novocaine into the cardiac wall where he is going to incise.

In other theatres Firor was doing a laparotomy, that disclosed multiple tumours of the stomach wall with a still larger one behind the stomach (? sarcoma of some kind). Bahnson did a splenectomy in a child for hæmolytic anæmia. He used a left transverse rectus incision, that seemed to give very inadequate access. He started by opening the gastro-colic omentum close to the spleen and ligated the splenic artery and a number of vessels in the splenic pedicle before mobilising the spleen.

In the evening the Pædiatric Resident gave a talk on fluid and salt balance in infants.

Tuesday, 26th.

Spent another morning and afternoon in the theatres. In the evening I gave a talk on general principles in cancer surgery: not a winner.

Wednesday, 27th September.

Blalock started with a mitral stenosis in a doctor's wife. Usual 3rd space approach and injection of novocaine into pericardium. After opening the pericardium, he held up the tip of the left auricular appendage with rubber-jawed dissecting forceps, and injected novocaine round its base. He then put in two silk purse strings, tied them loosely and put a clamp across the base of the appendage while he cut open the tip. He plunged in his index finger while the clamp was loosened and tore the valve, but just before this he had the head of the table dropped to lessen the chance of emboli entering the carotids. He tied the purse strings and closed.

Later he did a ductus arteriosus. A very difficult one as the duct was very wide, very short and very thin. He put in a couple of anchored ligatures at each end, not purse strings as they had no bites behind, but taking two bits of artery wall in front. Having tied these, he transfixed the isthmus between them and tied again.

In the next theatre Firor was removing a gall bladder for stones. A neat workman and a very thoughtful and impressive surgeon. He made a transverse incision across the right rectus, only about three inches long through peritoneum, which gave him direct access to the fundus of the gall bladder, and removed it sub-peritoneally from fundus down. I could see little in favour of the incision, which seemed to give very inadequate exposure. The subperitoneal removal of the gall bladder was neat, but, without previous control of the cystic artery, involved a whole lot of bleeding points and ligatures.

Afternoon. Round with Kieffer. Chief interest a negro of 34 with previous hæmoptysis and recent melæna, and a very localised filling defect in the cæcum. Discussion turned on Crohns disease. They treat early cases here conservatively (rest, non-residue diet, high vitamins, etc.) and report recoveries.

Later I went round their pathological department. The indexing of the autopsy reports is admirable. An interesting point is that they have no museum, but rely for teaching on pots containing all the organs of a case, which are handed round and handled by the class, and replaced by others when worn out.

I took the evening train to Detroit.

Thursday, September 28th.

I was met at Detroit station by Dr. Osius, a Detroit surgeon and an Alumnus of Ann Arbor. He drove me out about 10 miles to the Dearborn Hotel, situated in a park and one of the many activities of Henry Ford, for breakfast. Having by now missed Fred Coller's opening paper, we decided to visit the Ford factory. First we looked into the museum, a row of old artificer's shops re-erected, a smith, an iron worker, a carpenter, a cabinet maker, and so on, all standing in a street with their tools and materials and their goods in the windows. Beyond was a great hall filled with agricultural machinery, starting with the simple water-driven beam mortar for grinding corn. Then we went to the factory and saw two departments, the steel presses, and the assembly line. In the first the steel was running in sheets off enormous drums like stiff and shiny lavatory paper. Then it went through a series of enormous presses, the first pounding out blanks of various shapes, the others doing each one operation : for instance, a sheet would go in and a second later come out as a roof with front and back windows pressed down but still blank ; it would then be slid a few feet to the next press, which punched out the front and back windows. The work of the human beings seemed to demand less intelligence than we expect of a spaniel, indeed to be conducted entirely at the sub-cortical level. At the first press two men seize the pressed blank as it comes out and give it one co-ordinated heave that slides it to the next press. In the next press they slide the roof back to press 3, and throw the two blanks into a chute that leads below.

The assembly line was even more interesting because, though each action done was small, unintelligent and repetitive, the planning that brought parts to the line in the right order and at the right pace was uncanny. The line started with a bare frame with axles, and after sprouting an engine and a few other gadgets a body descended on to it, red, blue, grey, box-body, saloon ; but as it went on, moving chains converging on the line from unseen distances and other buildings, brought mudguards and bonnet tops, and somehow a red top arrived just as a red car reached the point when it needed a top, followed by a green top for the green car that followed. The last man on the line wielded an enormous rubber hammer, and lifted the boot top up and down, giving it enormous biffs with his hammer without dinting it or cracking the paint, till it fitted to his satisfaction. Then a man jumped in, started up, and drove it to a pair of gutters, in front of which were two white boards with black crosses like an ophthalmologist's test for astigmatism. As soon as he stopped, the gutters started buzzing the wheels round in turn and arms came out to test these for alignment. Meanwhile he switched on the headlamps and hit them with a hammer till they were centred on the crosses. As soon as the focus was right an O.K. sign lit up, and two O.K's. opened the gates carrying the crosses, and the car drove off.

We pushed on to Ann Arbor along a concrete speedway, and registered just before lunch. Osius gave me lunch at the university club. After lunch we went in to a couple of lectures in a huge auditorium seating something like 2,000, but the acoustics did not fit in with my particular audiometer pattern, and I heard nothing but the murmur of innumerable bees. We looked round the building, and went on at 6.00 to cocktails at Fred Coller's where everybody who was anybody in the surgical world was present. I was put up for the night in the very beautiful house of Dr. Bradley Patten, Professor of Anatomy. Ann Arbor is easily the most beautiful town I have seen in the United States, and after 13 years it is just as lovely. There are no skyscrapers. The academic buildings and students' living houses are delightfully planned. The whole town is a garden, each house standing in wooded grounds, with few straight roads and no built-up streets. The site is a cluster of hills round a small river. There are, moreover, few houses more delightful than the Patten's.

There was a big dinner in the evening at which I presented the congratulations and good wishes of the Royal Society of Medicine, and listened to speeches.

Friday, September. 29th.

9.00 a.m. Surgical clinical conference at the Hospital.

First topic. Cancer of the rectum and pelvic colon presented by Fred Coller and his group. First he showed a man of 68, admitted with obstruction following three months' increasing constipation and melæna. A cæcostomy had been done. The tube had slipped out, and the wound was a bit messy. Coller, discussing this case, passed on to the general question of abdominal-perineal resections versus sphincter-saving operations in growths at or just above the pelvic-rectal junction. He showed a number of pathological analyses of excised specimens, showing that many, even some fairly early and fairly high growths, had lateral glandular spread on the pelvic floor.

A second case was shown, a man of 49 with an almost identical story. A cæcostomy had been done, followed by resection. A third case was a man of 81 who had had a wedge resection of transverse colon and meso-colon three years before. He had come in with fresh obstruction, and the Barium enema showed a hold-up at the site of the previous resection, with an entero-colic fistula. The lesion was thought to be still resectable, though there were palpable glands, but an ileo-sigmoid short circuit had been done as a first step.

Figures were presented.

	No.	*Mortality. Per cent.*
Total cases of Cancer of colon	374	8.3
Palliative operations	48	29.2
Resected cases	326	5.2
Resected cases with metastases	97	13.4
Resected cases believed curable	229	1.7
	(4 deaths)	

A ten-year follow-up was presented of 1,064 cases of cancer of the pelvic colon and rectum, every one of which had been traced—a remarkable feat.

111 were resection-anastomoses and 543 were abdomino-perineals. Among the cases operated on there was a 66 per cent. five-year cure rate. An interesting point was that after five years there were very few recurrences in cancer of the colon, but in cancer of the rectum there were a few every year up to ten years.

The next topic was a discussion on the use of streptomycin in uro-genital tuberculosis, presented by Nesbit. A follow-up of 156 cases of nephrectomy for unilateral tuberculosis performed in pre-streptomycin days showed that 51 per cent. survived 5 to 10 years and 49 per cent. died. These were all carefully selected cases. The experience was similar to that of most clinics.

Now they are using streptomycin. They started with 1 gramme a day for 80 to 90 days. They then gave 2 grammes a day for the same period, but had many toxic symptoms. Now they are giving 2 grammes of Di-Hydro-Streptomycin which is less toxic and seems to be more effective. With 1 gramme of streptomycin, nine out of eleven relapsed: with 2 grammes of streptomycin four out of sixteen relapsed. With streptomycin there was a 50 per cent. relapse. With Di-Hydro-Streptomycin there was a 30 per cent. relapse. The Veterans' Administration report on Di-Hydro-Streptomycin that with cases showing a normal pyelogram they get 80 to 100 per cent. successes, and with cases showing an abnormal pyelogram 40 per cent. successes.

To sum up; they now reserve nephrectomy for patients who do not show marked improvement after 30 days' treatment with Di-Hydro-Streptomycin.

(To be continued)

Correspondence

Students' Club

SIR,—At a recent meeting of the Students' Club two subjects were discussed, the content of which, it was felt, should be made known to a wider circle through the columns of the *Gazette*.

It was brought to our attention that a number of students are unaware of the method by which they may register complaints or suggestions about the food provided in the College. At the annual general meeting of the Students' Club seven students are elected to the Committee and, from these, two students are elected by the Committee to serve on the board of directors of the College Catering Company for the ensuing year. The names of these students are posted on the Students' Club notice board in the colonnade—near the South African War Memorial—and those elected for the coming year are Messrs. D. P. Adamson and J. Dennis. Any student wishing to make a suggestion about the food in the College should make it known to either of these two representatives. Since Messrs. Adamson and Dennis may not be known to all students we have arranged for them to " liaise " with the representatives of the Students' Union, who thus represent an alternative channel through which suggestions can be made.

Second, the Students' Club would like to draw attention to the addition of a 1950 edition of the Encyclopædia Britannica to the Reference Library. This has been made possible by generous grants from the Gazette Committee and the Endowments Committee of the Hospital, to whom we would like to take this opportunity of publicly expressing our thanks.

Although still produced by the University of Chicago, this edition is printed and bound in England ; six volumes have already reached us and the remainder will follow in the ensuing six months. We have been provided with fifty free vouchers for the Research Service of The Encyclopædia Britannica. The distribution of these vouchers will be made by the committee of the Students' Club, to whom application for their use should be submitted. The committee has the right to grant or refuse any such request. The vouchers become invalid after ten years, and are available to any member of the Students' Club.

Yours, etc.,
A. BATTY SHAW,
Hon. Secretary,
Guy's Hospital Students' Club.

Passim

SIR,—With that part of Passim, 10th February, 1951, dealing with the shortcomings of the examination system as at present constituted, I cannot but agree. But has not your suggested remedy potential dangers ?

You suggest that qualifying examinations be held internally, but " do not insist that the hospital record of the candidate be taken into consideration."

This would seem to imply no change in the present system apart from the mutual cognizance of examiner and candidate, and familiarity of surroundings ; both calculated, and laudably so, to set the candidate at his ease and encourage him to produce of his best. Unhappily, sad reflection on human nature as it may be, the introduction of personalities, whereby John Student is examined by Dr. Frend instead of Candidate " X " by Examiner " Y " is open to abuse. Honesty compels us to admit of a possible situation arising where an adequate candidate will fail because his examiner disapproves of his drinking habits, or " has never liked his face," for other reasons totally unrelated to medical qualification.

No, let us keep examinations impersonal, but why not insist on a consideration of the student's hospital record or " sign-ups " in every case ? In this way the bad examination candidate with a good hospital record, and the clinically inept " examination-passer " could be seen in a truer perspective without personal likes and dislikes being allowed any play.

In conclusion, let us not be too depressed even if existing regulations continue to obtain ; for the " reliable, gentle, and trustworthy student " such as you describe will by his very nature be possessed of the necessary determination to overcome any obstacle placed in his path, albeit more slowly and more painfully than his " clever " counterpart.

Yours, etc.,
W. T. BARRETT.

Sherlock Holmes and Dr. Watson

A MEDICAL DIGRESSION

By MAURICE CAMPBELL, O.B.E., M.D., F.R.C.P.

Reprint of a pamphlet (now out of print) which was elaborated from a Clinical Lecture given at Guy's and a paper read to St. Bart's Abernethian Society in 1934.

II.—OF CHEMISTRY, ANATOMY, AND PHARMACOLOGY

WHEN Holmes and Watson were students, physiology had not yet come into its own, and we must turn to chemistry and anatomy for their knowledge of the preliminary sciences. The chemical researches of Holmes and his work at the chemical bench are well known. When he first met Watson he had just perfected a test for hæmoglobin which was to replace the old guaiac test (The Study in Scarlet), and even in his student days had spent seven weeks in his long vacation working out a few experiments in organic chemistry (The Gloria Scott). Later, during his absence from London, after the encounter with Moriarty, he conducted a research into the coal-tar derivatives at Montpelier (The Empty House) and scattered through the stories are shorter references to the work he carried on from day to day, such as the analysis of the acetones, at which he put in an all-night sitting during the adventure of the Copper Beeches.

Watson was fond of any reference to chemical work, and described Sholto's room, which had been fitted up as a laboratory—the double line of glass-stoppered bottles on the wall, the table littered over with Bunsen burners, test-tubes, and retorts (The Sign of Four). In the early days he had described Holmes as a first-class chemist (The Study in Scarlet), and he must certainly have kept up his interest to carry on these investigations.

ANATOMY

But from the medical aspect we are more interested in Holmes's knowledge of anatomy. He was well up in this according to Stamford, and Watson tells us that his knowledge was accurate but unsystematic; if Miss Dorothy Sayers is correct in deducing that Holmes read the Natural Science Tripos and chose Comparative Anatomy as one of his subjects (Baker Street Studies), this might be expected, for Watson, like most doctors, would think that anatomy meant human anatomy. Holmes had not learnt anatomy as thoroughly as most medical students have to—indeed, Stamford states that he had not taken out any systematic medical classes—and it was Watson who identified the upper condyle of a human femur (Shoscombe Old Place), though it was Holmes who detected that the ears had been preserved in salt and not in carbolic or spirit, as would have been the case had the parcel been the ghastly prank of a medical student from the dissecting room (The Cardboard Box).

But there were several more general anatomical points which Holmes had studied deeply and referred to frequently—especially with regard to the head, the hands and the feet. He deduced the intellectual capacity of Mr. Baker from the size of his bowler (The Blue Carbuncle), and though this had been criticised because of the many exceptions, he was quite correct in the general rule, which has been used as late as this year in a research on the mental capacity of African negroes. Indeed, it is unlikely that Holmes would make such a mistake, for he was able to discuss skulls with the expert anthropologist Dr. Mortimer (The Hound of the Baskervilles), and had also written two monographs on the human ear in the *Anthropological Journal* of 1887.

The deduction of a client's occupation from its effects on the hands is frequently noted (the manual labour of Jabez Wilson, the typewriting of Mary Sutherland, the music of Violet Smith). Some time before 1888 Holmes had written a work on the influence of a trade upon the form of the hand, with lithographs of the hands of slaters, sailors, cork-cutters, compositors, weavers, and diamond-polishers. The same idea was developed in a rather different way in a series of papers by Lane (now Sir Arbuthnot), which dealt with the skeletal changes produced by different occupations such as the shoemaker, the coal-trimmer, and the washerwoman, and were published between 1886 and 1888.* It would be interesting to know if Holmes had read Lane's papers, or vice versa, or if this was another example of the simultaneous publication of new discoveries by independent routes as in the famous case when Darwin and

Wallace published their theory of Evolution almost at the same time ; in one paper even the title is almost the same.[1]

As I have been unable to trace Holmes's paper, the following extracts from Lane's show the trend of thought: "The body—the changes in whose anatomy form the subject of this paper—was sent to the hospital for dissection. I was therefore enabled to observe accurately every structural variation that had resulted from the habitual performance of a definite series of movements, entailing the expenditure of a considerable amount of muscular exercise during the greater part of a long life-time of 73 years. Having concluded from a careful examination of the changes which the body presented that the man had been a shoe-maker, I wrote to the infirmary in which he had died and was kindly informed that he was entered in their books as a shoemaker."[2]

"Let us now examine into the manner in which a vigorous labourer who carries a heavy load habitually transmits that weight through his feet. . . . he has a well-formed inner arch to his foot. You will observe that the epidermis is thicker beneath the outer part of the heel than the inner, that it is also very thick along the outer margin of the sole, along the whole under surface of the pad and beneath the ball of the great toe."[3]

"What I wish to call attention to here is that the occupation of washing clothes is responsible for the production of very definite pressure changes in the joints of the hand and wrist."[4]

"The skin covering the patella and the upper portion of the tibia in front was dense and thick, as so commonly seen in charwomen or in those who do much scrubbing in the kneeling position."[4]

"The changes in the right thumb were very similar to those in the left, the differences which were present being dependent upon the fact that the awl was held in the right hand and the string alone in the left."[2]

The words of Lane and the spirit of Holmes. It may not be generally realised that occupation has an equally or more striking effect on the bones of the skeleton, but I have given quotations dealing more with the external results because these are open to easy verification. It may be objected that Holmes could hardly have written such classics before he was thirty, but Lane was not thirty when he wrote these papers, and many men do their most original work at an early age, and in the rest of their lives apply these observations to practical affairs.

Holmes was particularly interested in footprints, and made many deductions from them, and was familiar with plaster of Paris for obtaining casts of them. He made a good deal of use of the relationship between the length of the stride and the height (Sign of Four, Study in Scarlet, and Boscombe Valley Mystery) ; he does not give us the formula on which he worked, but it was probably :—

Height (in inches) = 2.09 Length of stride (in inches).

The picture of Holmes on the scent of footprints and the amount he was able to deduce are among the most attractive we possess, and outstanding among these is the Adventure of the Priory School with the bicycle tracks and the horses shod with special shoes to simulate the hooves of cows.

HEREDITY

Though physiology is less well represented than anatomy, there is frequent reference to one branch of general biology.

To the student of human nature heredity is one of the most attractive of all biological sciences, though its immense importance is only slowly being realised. Examples of the inheritance of mental and physical qualities were recorded in many of these adventures as they came under notice, and most likely Holmes was responsible and must be regarded almost as a pioneer.

It was Holmes who remarked that he and his brother Mycroft had inherited their powers of observation and deduction from their grandmother's brother,

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*REFERENCES

1. A Remarkable Example of the Manner in which Pressure-Changes in the Skeleton may Reveal the Labour History of the Individual. *Journal of Anatomy and Physiology*, xxi, 385, 1886–87.
2. The Anatomy and Physiology of the Shoemaker. *Journal of Anatomy and Physiology*, xxii, 593, 1887–88.
3. Deformities which Develop during Young Life. *Guy's Hospital Reports*, xliv, 241, 1886–87.
4. Some Changes in the form of the Spinal Column and Joints of the Hand ; illustrated by the Anatomy of the Charwoman. *Guy's Hospital Reports*, xliv, 359, 1886–87.

the French artist (The Greek Interpreter), and on another occasion noted the similarity of the ears of Miss Sarah Cushing and of her murdered sister Mary ; he had written on the subject in the *Anthropological Journal* of 1887 (The Cardboard Box). I have not been able to trace this paper in the Journal of the Anthropological Institute for the years 1886–88, and the reference is probably to a lecture on the inheritance of ancestral peculiarities and the hereditary transmission of disease which was delivered at that Institute on November 19th, 1887, at 4.30 p.m. In view of the remarks of Holmes on the relationship of intelligence and the size of the skull, it is worth noting that the same journal contains papers on the skull and the volume of the cranial contents by Rolleston (now Sir Humphrey), and on the localisation of the functions of the brain by Ferrier and Victor Horsley—papers which must have been of great interest to Holmes and Watson.

Holmes was aware of the erratic inheritance of negro characteristics, for though Mrs. Grant Munroe was English and her husband had only shown a trace of his African descent, their child was a coal-black negress.

Similar characters in the writing of father and son were noted in the Cunninghams (The Reigate Squires), and the son's cruelty to animals led to a correct deduction of the father's cruel nature, though it was well hidden (The Copper Beeches). Holmes was specially interested in the inheritance of mental qualities, and, when discussing Colonel Sebastian Moran, he puts forward a theory of his own extending to the mind the embryological theory of recapitulation, viz., that the individual represents in his development the whole procession of his ancestors, and that such a sudden turn to good or evil stands for some strong influence which came into the line of his pedigree. The person becomes, as it were, the epitome of the history of his own family. The theory is somewhat fanciful, but some of the examples that came under his notice seemed to support it.

The wild, fierce, strain that was present in the first Hugo Baskerville and gave rise to the family legend of the hound, came out again in the fiery temper of Sir Henry Baskerville, in his uncle Rodger, the black sheep of the family who was forced to fly to Central America, and in the villainous Stapleton, who was really Rodger's son. Both Rodger and Stapleton had also a striking physical resemblance of the old Hugo, and this was one of the clues that led Holmes to suspect Stapleton, by guessing he was a member of the family with designs on the succession. Dr. Mortimer, too, was interested in the subject, and has published a paper in the *Lancet* of 1882 on " Some Freaks of Atavism " (The Hound of the Baskervilles).

We read of another family where violence of temper approaching mania was hereditary in the males (sex-limited inheritance), and where the family estate had been squandered because four successive heirs were wasteful and dissolute (The Speckled Band). Mr. Roberts (*loc. cit.*) suggests rather unkindly that the Watson family, with their propensity for gambling, provided another example.

PHARMACOLOGY

There are so many references to this subject that only some of them can be included. Watson makes frequent mention of many of the common drugs, especially perhaps opium and cocaine, and displayed a considerable knowledge of their use, though some of the more out-of-the-way facts may have been learnt from Holmes, who was well up in belladonna, opium, and poisons generally (Study in Scarlet).

Watson describes the yellow pasty face, drooping lids, and pin-point pupils of Isa Whitney sitting all muddled in a chair, the wreck and ruin of a noble man ; after reading De Quincey's work he had started to drench his tobacco with laudanum and had become an addict to opium and an object of mingled horror and pity to his friends and relatives. It was while rescuing him from the Wapping opium den so graphically described by Watson that he met Holmes and was embarked on the Adventure of the Man with the Twisted Lip.

When powdered opium was used by John Straker to drug his stable boy so that he could get into the stable at night to maim " Silver Blaze," Holmes correctly deduced that the opium must have been given by someone who had also arranged for the lad to have curry for supper, as this was just the dish to disguise its taste. When it was used by ex-President Don Murillo to drug his governess, whom he wished to carry off with him, Watson noticed her head hanging listlessly on her breast, and recognised that she had been drugged with opium as the pupils were dark dots in the centre of the broad grey iris (Wisteria Lodge).

We do not hear of opium being used medicinally, but paregoric was recommended for asthma and bronchitis, and Watson was able to inject morphia when Baron Gruner had vitriol thrown at him and when Professor Presbury was severely bitten by his dog (The Illustrious Client and The Creeping Man), but unfortunately he was not present to give it when it was begged for in The Lion's Mane. It is interesting as showing the increasing fashion for injections that all these episodes occurred relatively late—in 1902, 1903, and 1907, while the references to opium were earlier.

When Holmes made use of belladonna to help in simulating a dangerous attack of fever, Watson described how his eyes had the brightness of fever with a hectic flush on either cheek, but it was due to starvation and belladonna and rouge ; Watson's mistake was only pardonable because he was given no chance of coming near and detecting that there was no rise of temperature or pulse rate (The Dying Detective). The use of belladonna for its effect on the eyes has sometimes its devotees even in hospital circles.

Holmes's use of cocaine is too well known to elaborate. At first it was only occasional, but by 1888 (The Sign of Four) it had become a regular habit. Watson no doubt realised the immediate danger as well as the risk of addiction when he read an article in the *British Medical Journal* of October 30th, 1886, describing a case where the injection of 12 minims of a 10 per cent. solution under the skin had been followed in three minutes by a syncopal attack with twitching of the face and a cold clammy perspiration—in fact, all the appearances of impending death. We are not told how much cocaine Holmes used, but when Watson was led to remonstrate about its use he was injecting a 7 per cent. solution three times a day ; even 5 minims of this would be above the minimum, and 10 minims of this would be above the maximum dose recommended in the British Pharmacopæia.

In the following year, perhaps because of Watson's remonstrances, he was only using it from time to time (The Scandal in Bohemia and The Man with the Twisted Lip). After that we hear no more of it till 1897, and even this is an uncertain reference, for we read that Holmes's iron constitution had given way in the face of constant hard work of a most exacting kind, aggravated, perhaps, by occasional indiscretions of his own. One cannot help admiring the ability of Dr. Moore Agar, of Harley Street, who was able to prevail on Holmes to take a complete rest.

To the modern readers who know the horror with which cocaine addicts are regarded, it must seem strange that Holmes should ever have indulged, but the explanation lies, I think, in the following facts about its history : Though the use of cocaine had been known in Mexico since the 12th century and extended by Pizarro's conquest of Peru in 1542 and brought to Europe in 1750, it did not become well known in medical circles till its use by the Viennese oculist Köller in 1884, so that when Holmes began to use it there had hardly been time to realise its disastrous after-effects in Europeans ; and he hoped, no doubt, to find it of great advantage in stimulating his brain and helping him to endure fatigue as the Indians of the Andes had for so many centuries. His ability to give it up when he realised its dangers after he had acquired the habit firmly shows the stuff of which Holmes was made.

Although the hypodermic syringe had been introduced into medicine a generation before by the French surgeon Pravaz, it seems to have become increasingly popular about this time, and we read in the *Lancet* of 1887 that "the growing practice of giving and taking hypodermic injections needs to be stopped. The instrument makers could tell a startling tale of the number of hypodermic syringes sold to the public in a year." We can only hope that the publicity Watson gave to the method did no further harm.

There are many references to vegetable alkaloids of the convulsive group—indeed, it seems to have been a favourite subject of Watson. Gelsemium, from the root of the yellow jasmine, is one of these poisons which produce convulsions, and it seems probable that he was familiar with a paper by A. C. Doyle on the action of gelsemium sempervirens in the *British Medical Journal* of 1879, and therefore specially interested in the cases where similar poisons were used.

The recommendation of strychnine in large doses as a sedative is sometimes quoted as evidence of Watson's ignorance, but this is a mistake ; for the episode is to illustrate the confusion into which he had been thrown by falling in love with Miss Morstan : Watson could almost have been forgiven if he actually had given the injection to Thaddeus Sholto, who must have been very trying in the cab on that journey.

Later the same evening when his brother Bartholomew was shot with the poisoned dart and found with the *risus sardonicus* on his face and with his muscles in a state of extreme contraction, far exceeding the usual rigor mortis, Watson rightly deduced that it was some strychnine-like substance which would produce tetanic contractions ; probably it was curare, which is used by South American natives on their arrows, or some similar substance used by the Andaman islanders.

Curare is mentioned by name as the poison used by the small boy on his half-brother and sucked out by his devoted mother. Holmes suspected something of the sort even before he found the walls of the house hung with South American weapons ; when he saw the dog dragging its legs with a limp he quickly realised that curare had been injected with some pointed instrument —probably one of the arrows—and that the boy had just practiced on the dog and produced a partial paralysis, though the vet. had only been able to diagnose spinal meningitis (The Sussex Vampire).

It is not so easy to know what Jefferson Hope gave to Drebber for the crucial choice of the two pills—one fatal and one harmless. The dying terrier on which it was tested gave a convulsive shiver in every limb and lay as rigid and lifeless as if it had been struck by lightning. Jefferson Hope had worked in America in a laboratory, and had taken some South American arrow poison one day when the professor had been lecturing on alkaloids, and had worked it up into a small pill. This might suggest curare again, but it is only poisonous when injected, and harmless when taken by mouth.

We are not told what poison was used by the professor's wife (The Golden Pince-Nez) before she left her hiding place in the cupboard—possibly coniine, the alkaloid of hemlock, which was also used by Socrates—for, like him, she maintained control of her speech and faculties till the last moment. Coniine is almost without effect on the cerebrum, and causes death by respiratory paralysis.

Another poison mentioned is prussic acid, but Holmes persuaded the " Veiled Lodger " not to take it, and knew that he had been successful when she sent him her supply by post the next day.

Other useful drugs are mentioned less often than poisons, and reference has been made already to the use of quinine in the treatment of malaria. Amyl nitrite was used for catalepsy (The Resident Patient) ; it is better known for its value in angina pectoris, for which it was introduced in 1867 by Lauder Brunton when he was still a house-physician, but it is still recommended in some modern books as of use in prolonged epileptic attacks, so its use for catalepsy was quite reasonable.

Turning to other chemicals with pharmacological actions, chloroform is mentioned several times. It was used to overpower Mrs. Maberly when her house, the Three Gables, was broken into, and by Holmes when he was masquerading as an Irish-American spy for the German Von Bork (His Last Bow) ; its most interesting use was in attempting to kill Lady Frances Colefax in the coffin, " which took longer being out of the ordinary," because it was made to hold two. Watson, as always, was prompt in an emergency, and undoubtedly saved her life, his use of artificial respiration probably being more efficacious than the injection of ether which he gave.

Another occasion when Watson's prompt measures were instrumental in saving life was when they found Paul Kratides and the Greek Interpreter overcome by carbon monoxide poisoning from the fumes of charcoal. There was a dull blue flame from the charcoal brazier and a horrible poisonous exhalation which set them gasping and coughing. After opening the windows they dragged out the two victims. Both were blue-lipped and insensible, with swollen congested faces and protruding eyes. Kratides was too far gone for their aid, but Melas still lived, and in less than an hour, with the aid of ammonia and (as usual) brandy, Watson had the satisfaction of seeing him open his eyes and of knowing that he had been drawn back from that dark valley in which all paths meet. His recovery was, perhaps, rather quick considering that the exposure had killed Kratides, but the latter was already in a poor state of health, so the former would naturally stand it better.

The Retired Colourman also made use of gas to kill his wife and her lover after he had enticed them into his strong room, and here also death would be due to carbon monoxide poisoning. It is not often used for murder, or, if it is, is not often detected; but during the last twenty or thirty years has become an increasingly common method of suicide.

As at the end of a long day, we turn expectantly to a pipe, it is pleasant to turn from these dangerous poisons to two more harmless alkaloids, caffeine and nicotine—the active principles of coffee and tobacco. Watson and Holmes were keen smokers, and their consumption must have been considerable.

" You don't mind the smell of strong tobacco I hope," said Sherlock Holmes, when sharing the Baker Street lodgings was being discussed.

" I always smoke ' ship 's' myself," Watson answered.

" That's good enough." And so the famous partnership began. They would have approved of R. L. Stevenson's advice that no woman should marry a non-smoker.

Both generally smoked a pipe, though they often indulged in a cigar, especially after dinner when celebrating the successful finish of a case. Occasionally we hear of Holmes smoking a cigarette (The Scandal in Bohemia, The Final Problem, and The Boscombe Valley Tragedy); they were only then becoming really popular, though they had spread to England after the Crimean War. Watson must have been a more regular cigarette-smoker, for Holmes says that he always brought them at Bradley's in Oxford Street, and recognised him in the hut on Dartmoor by the stub with their name on, which had been thrown away outside.

Holmes probably smoked an ounce of tobacco a day; it makes one envious in these days to read of tobacco at fourpence an ounce, for he remarked that at eightpence an ounce it was a luxury since good tobacco could be bought at half the price (The Yellow Face). Holmes habitually smoked a pipe before breakfast, and, considering what it was composed of, he must have acquired considerable tolerance—his admirers will remember its composition and will forgive the foible of a great man, but others might be more squeamish, so I will only refer to the story (The Engineer's Thumb).

From the Hound of the Baskervilles we know that he sometimes bought a pound of the strongest shag all at once, which suggests a heavy smoker, and as he consumed an ounce of tobacco during one all-night sitting (The Man with the Twisted Lip) and another time three pipes in fifty minutes (The Red-Headed League), our estimate can hardly be excessive. We are less sure about Watson, but he certainly indulged in a comforting last pipe before going to bed (The Crooked Man).

Holmes was aware of the curious double action of nicotine (which has been supported by a recent American investigation into its effects on students) of stimulating the brain and nervous system under many conditions, but soothing them when they are already over-excited. Holmes generally used it for the former purpose, but Jefferson Hope illustrated the latter use when he was so excited at having Drebber safely in his cab that he feared that his aneurism might burst.

The effect of caffeine is not like this, for it is always stimulating. Watson quotes cases where this was the effect desired, as in The Naval Treaty, and cases where it was an unwanted after-effect—as in the Musgrave Ritual, when Musgrave could not sleep at night because of it and came downstairs, and found the butler in the study with his papers.

We must not forget the famous monograph of Holmes, " Upon the Distinction between the Ashes of the Various Tobaccos," in which he enumerated 140 forms of cigar, cigarettes, and pipe tobacco, with coloured plates illustrating the difference in the ash (The Sign of Four and The Boscombe Valley Mystery). Neither he nor Watson would have approved of a book which was published in New York in 1916: " The Tobacco Habit Easily Conquered; How to do it agreeably without Drugs; with an Appendix on Tobacco the Destroyer."

(To be concluded)

House Appointments

1st MARCH, 1951

ASSISTANT HOUSE SURGEONS.

To Mr. Slesinger : Mr. W. Vans Agnew.
" Mr. Wass : Mr. J. R. Rees.
" Mr. Blackburn : Mr. J. C. C. Kendall.
" Mr. Lawrie : Mr. J. H. Bailey.
" Mr. Glover : Mr. D. B. Amos.

Appointed for six months, the first three months as A.H.S.

OUT-PATIENT OFFICERS.

Mr. J. A. C. Bamford.
Mr. B. H. Bass.
Mr. P. H. Kendall.
Mr. I. B. Thomas.
} 3 *months.*

3 *months.*

HOUSE SURGEONS.

To Sir Heneage Ogilvie : Mr. A. W. R. Williamson.
3 *months.*

" Mr. Massie : Mr. D. R. Pugh.
6 *months.*

" Mr. Eckhoff : Mr. T. S. Hart.
3 *months.*

" Mr. Atkins : Mr. P. L. Williams.
6 *months.*

HOUSE PHYSICIANS.

To Sir John Conybeare Mr. J. H. Wilson.
and to Dr. Hardwick: Mr. N. S. Galbraith.
6 *months.*

" Dr. Boland and Mr. H. M. Baird.
" Dr. Baker : Mr. K. W. Gray.
3 *months.*

" Dr. Hampson and Mr. W. H. Watson.
" Dr. Kauntze : Mr. A. M. Reader.
3 *months.*

" Dr. Douthwaite and Mr. J. Taylor.
" Dr. Mann : Mr. J. M. D. Hooper.
6 *months.*

RESIDENT OBSTETRICIANS.

1.11.50—30. 4.51 : Mr. A. E. R. Buckle.
1. 1.51—30. 6.51 : Mr. P. J. Dwyer.
1. 3.51—31. 8.51 : Mr. P. S. B. Russell.
1. 5.51—31.10.51 : Mr. A. W. Cook.

OPHTHALMIC HOUSE SURGEON.

Mr. I. G. Johnston. 3 *months.*
(Non-Resident)

THROAT AND EAR HOUSE SURGEON.

Mr. P. R. Sowerby. 3 *months.*

DERMATOLOGICAL HOUSE PHYSICIAN.

Mr. D. C. Turk. 3 *months.*
(Non-Resident)

GENITO-URINARY HOUSE SURGEON.

Mr. M. C. Gilbert. 3 *months.*

CHILDREN'S HOUSE PHYSICIANS.

Mr. C. Steer. 3 *months.*
Mr. G. N. St. J. Penney. 6 *months.*

HOUSE SURGEON TO THE THORACIC UNIT.

Mr. W. Van't Hoff. 3 *months.*

HOUSE SURGEON TO THE NEURO-SURGICAL UNIT.

Mr. F. G. Ellis. 3 *months.*

NEUROLOGICAL HOUSE PHYSICIAN.

Mr. R. Goulding. 6 *months.*

RESIDENT JUNIOR CLINICAL PATHOLOGISTS.

12.10.50—31. 3.51 : Mr. J. T. Cecil.
1.10.50—31. 3.51 : Mr. D. P. Winstanley.
1. 4.51—30. 9.51 : Mr. D. G. Chalmers.
12. 4.51—11.10.51 : Mr. J. T. Cecil.

HOUSE PHYSICIAN IN THE YORK CLINIC.

1.3.51—31.8.51 : Mr. J. A. J. Smith.
1.4.51—30.9.51 : Vacant.

RESIDENT ANÆSTHETISTS.

20. 9.50—19.3.51 : Mr. J. V. Kilby.
12.11.50—11.5.51 : Mr. R. J. Vale.
20. 3.51—19.9.51 : Mr. J. V. Kilby.

PEMBURY : HOUSE PHYSICIAN.

Mr. H. F. Pile.

ORPINGTON : THROAT AND EAR HOUSE SURGEON.

Mr. D. G. E. Alldridge.

JOYCE GREEN : HOUSE SURGEON.

Mr. B. O. L. Duke.

QUEEN MARY'S, SIDCUP : HOUSE PHYSICIAN.

Mr. A. M. Kingon.

Sport

RUGBY FOOTBALL

Guy's *v.* Coventry

At Coventry. Result—Lost 0—22
3rd February, 1951.

Guy's held Coventry in the first five minutes of this game, but the home side, who included six internationals, soon settled down to a fast open game on a pitch that was ideal for rugby.

Their pack was far heavier than the Hospital eight and heeling the ball regularly. Preece was given ample opportunity to show how good he really can be.

Coventry soon went ahead and at half time were leading by 16 points to nil.

In the second half the Hospital pack really got stuck in, and many good foot rushes were seen, but not always cohesive. The three-quarters defended well and to hold Coventry to two more tries in the second half was no mean feat after they had established such a first half superiority.

In the pack, Clark, Davies, Kirkbride and Cremin were always prominent, and in the threes Knight and Osborne got through some good solid work.

Team : W. J. Howells ; E. O. James, J. Osborne, W. R. Thomas, G. D. Thomas ; L. Balfour-Lynn, R. K. Knight ; D. Clark, C. T. N. Wilson, J. Kirkbride, C. Pook, D. Gunnadine, C. Wilkinson, W. G. Davies, B. Cremin.

Guy's *v.* Devonport Services

At Devonport. Result—Lost 11—0
27th January, 1951

On the wettest pitch the Hospital has so far played this season it was to be expected that the game should remain forward and close. To the delight of the crowd this was not the case. Both sides favoured to pass the ball as much as possible and play raged from end to end.

The movements broke down not because of bad handling but by players being unable to keep their feet on a pitch which soon became a quagmire. With exchanges very even, over-anxiousness on the part of the Guy's defence allowed a penalty to be awarded in the region of the half and forward, which was beautifully goaled. Soon afterwards when the Services were again pressing the same mistake led to the same result and when the teams changed ends the Hospital was down 6 points.

The second half saw the Hospital with a marked territorial advantage and numerous movements almost resulted in tries. G. D. Thomas was actually over the line but was unable to ground the ball after a beautiful 30-yard dash. Balfour-Lynn broke through close to the scrum and was pulled down five yards from the line, and T. Smith, breaking through, was unfortunate to see his neatly-placed cross kick scrambled away to touch. Guy's were outhooked in the tight, but in the loose were far superior. T. Wilson started a grand inter-passing movement amongst the members of the pack which deserved to succeed. At this point in the game it was surprising that the opposition should score the only try of the match, a fly kick up the field and slightly diagonal passed over the defence and our opponents won the race for the touchdown. The try was again goaled by the Services kicker. This saw the end of the scoring and soon after G. Bellis became unfortunately injured but managed to hold out for the last few minutes of play.

A feature of the game was the better combination of the pack and especially the improvement of their covering both in defence and attack. The backs in defence were excellent and in attack handled and passed confidently.

BOXING

UNITED HOSPITALS BOXING CLUB

The Inter-Hospitals Boxing Championships are to be held at Seymour Hall on Monday, March 12th at 7.30 p.m.

The holders are Guy's but there will be strong opposition from St. Mary's, London, and St. Thomas's. The tickets are 12*s.* 6*d.*, 10*s.*, 7*s.* 6*d.*, 5*s.*, and 2*s.* 6*d.*, and can be obtained from the Secretary, J. H. Winston, or the Secretaries of the Boxing Clubs of the other Hospitals.

ANNUAL OPEN TOURNAMENT

Guy's *v.* Metropolitan Police

Seymour Hall, 13th February, 1951

Out of the nine Guy's men fighting, only five fought policemen ; of these five bouts Guy's won three bouts.

The other four bouts were against boxers of other clubs and we won two of these.

L. B. Lux, who is a south paw, won his fight by clever evasive action mixed with telling blows. A. Atkinson showed much improved style, and stopped his opponent in the 2nd round. R. B. John won his fight in the 3rd round after a slugging match with his opponent.

B. Cremin and W. Watson, each in their inimitable style, disposed of two policemen completely in the aggregate time of about 70 seconds, Cremin hitting his opponent off his feet. D. Lipington unfortunately had to stop in the 2nd round when clearly winning, because of the opening of an old eye injury. T. Winstanly and R. A. Peebles both won closely contested and well-fought bouts. K. Lowings lost in the 1st round to a very strong opponent.

In special contests J. Festa lost to Gunner Bates, the International, in an exciting bout, and unfortunately M. Dowling retired with a cut eye in the 1st round of his fight against Pte. Bonnici, Army Southern Command Champion. Three other bouts were fought which also produced good entertainment.

Thanks are due to Mr. George Winston for organising such a successful meeting.

Results

T. Winstanley (Guy's) lost to A. Bragg (Brixton Youth A.C.) on points.

L. B. Lux (Guy's) beat D. Coles (Earlsfield A.B.C.) on points.

A. Atkinson (Guy's) beat P.C. Kerr (L Div., Met. Police). Referee stopped contest in the second round.

K. Lowings (Guy's) lost to J. Jackson (Earlsfield A.B.C.). Referee stopped contest in the first round.

R. B. Johns (Guy's) beat R. Gaster (Earlsfield A.B.C.). Referee stopped contest in third round.

B. Cremin (Guy's) beat P.C. Emery (L. Div., Met. Police). Referee stopped contest in the first round.

D. Lipington (Guy's) lost to P.C. Gee (L. Div., Met. Police). Lipington retired with cut eye.

W. Watson (Guy's) beat P.C. Petrie (L. Div., Met. Police). Referee stopped contest in the first round.

R. A. Peebles (Guy's) lost to T. West (Brixton Youth A.C.) on points.

Special Contests

P. B. Owen (St. Mary's) lost to P.C. Annis (L. Div., Met. Police) on points.

M. Dowling (Lynn A.C.) lost to Pte. S. Bonnici (Army). Dowling retired with cut eye.

L. Bates (Army) beat J. Festa (West Ham A.B.C.) on points.

D. Draper (Reading Aero A.B.C.) beat E. Dalgleish (Army) on points.

R. Buck (West Ham A.B.C.) beat K. Parr (Reading Aero A.B.C.) on points.

Hospital Information, etc.

NOTICES

APPOINTMENTS VACANT

Applications are invited for the post of part-time **Registrar to the Department of Psychological Medicine,** with attendance on five sessions per week, to begin duty as soon as conveniently possible. Appointment until 30th September, 1951, in the first instance. Salary proportionate at the rate of £775 per annum, in accordance with the National Health Service terms and conditions of service.

Forms of application from the Dean and should be lodged in the Medical School Office not later than **26th February, 1951.**

York Clinic for Phychological Medicine. Required, **Resident House Physician** (Male), to commence on 1st April, 1951. The post offers good opportunities for post-graduate study. Salary in accordance with the terms and conditions of service for House Officers in the National Health Service. Appointment for 6 months in the first instance and may be renewed for further such periods.

Applications, with copies of 2 testimonials, should be sent to the Superintendent, Guy's Hospital, London Bridge, S.E.1, on or before **15th March, 1951.**

APPOINTMENT

R.M.O. Nuffield House.

1.3.51—30.9.51	Dr. W. J. C. Symonds.
6.4.51—5.10.51	Dr, D. F. Cantwell.

GUY'S HOSPITAL DANCE BAND

requires a Tenor Sax player to complete the group. Offers to be addressed to David Forman, Guy's Hospital.

INDEX, 1950

The Index for the *Gazette* for the year 1950 is now ready and readers who wish to receive a copy are asked to apply to the Manager, *Gazette* Office, Guy's Hospital, S.E.1, or to the Librarian, Wills Library.

PUPILS' PHYSICAL SOCIETY MEETINGS

The March meeting will be held jointly with St. Thomas's Hospital on Tuesday, March 20th. On this occasion we shall be guests at St. Thomas's. Further particulars will be posted on the Hospital Notice Boards.

The April meeting will be held on April 10th, at 7.45 p.m., in the Anatomy Theatre. Mr. Philip Mitchiner, C.B., C.B.E., T.D., M.S., M.D., will be our guest for the evening and will give an address on " Meandering in through the Middle East."

PASS LIST

ROYAL COLLEGE OF SURGEONS OF ENGLAND

F.R.C.S.

Primary Examination

M. J. Blunt   D. G. L. Davies

UNIVERSITY OF OXFORD

December, 1950

Medicine, Surgery and Midwifery

D. J. Müller

UNIVERSITY OF CAMBRIDGE

M.A.

J. P. Bull

APPOINTMENT

UNIVERSITY OF MANCHESTER

W. H. Trethowan has been appointed Lecturer in Psychiatry.

CHANGES OF ADDRESS

D. J. Tibbs, F.R.C.S., 17, The Brookway, Blackheath, London, S.E.3. Tel.: Lee Green 1972.

PAPERS BY GUY'S MEN

Allsopp, C. B., and another. The Effects of Fluoroacetate on Beating Embryo Chick Heart in Tissue Culture. *Exp. Cell. Res.*, 1950, i, 590.

Atkins, H. J. B. Fibro-Adenosis. *Proc. R. Soc. Med.*, 1950, **43,** 1060.

Bradley, W. H. The Mechanism and Prevention of the Rheumatic State (Presidential Address). *Proc. R. Soc. Med.*, 1950, **43,** 979.

Brock, R. C. Discussion on the Role of Sinusitis in Bronchiectasis. *Proc. R. Soc. Med.*, 1950, **43,** 1095.

Cathie, I. A. B. Erythrogenesis Imperfecta. *Arch. Dis. Childh.*, 1950, **25,** 313.

Clark, J. V. Bullous Otitis Externa. *J. Laryng.*, 1951, **65,** 38.

Clarkson, Patrick. A-Bomb Casualties and Arrangements for their Care. *Brit. J. Plastic Surg.*, 1950, 3.18

Clarkson, Patrick. An Account of Six Cases of Pedo-Carpal Transference undertaken for Thumb Reconstruction, or for Treatment of Congenital Adactyly. *Proc. Novena Asamblea Nacional de Cirujaros (Plastic Surgery Section), Mexico City*, 1950.

Clarkson, Patrick. Correction of Deformities of the Jaw. *Ann. R. Coll. Surg. Eng.*, 1951, **8,** 23.

BIRTHS

BAILEY.—On February 5th, 1951, at Guy's Hospital, to Joan (née Greatorex), wife of Anthony A. Bailey, L.D.S., R.C.S.—a daughter (Rosemary Anne).

BROWN.—On January 17th, 1951, at Park Vale, Streatham, to Anne (née Surtees, S.R.N.), wife of P. F. E. Brown, M.C.R.C., L.R.C.P.—a daughter (Kathryn).

McGUIRE.—On February 9th, 1951, at Guy's Hospital, to Rowena (née Sanders), wife of E. J. McGuire, M.B., B.S.—a daughter (Gabrielle).

PILCHER.—On February 3rd, 1951, in Singapore, to Elizabeth Margaret (née Smedley), wife of Richard Pilcher, M.C., M.R.C.S., D.O.M.S.—a daughter (Anne Elizabeth).

WAGNER.—On January 30th, 1951, at The Norfolk and Norwich Hospital, to Joyce (née Waite), wife of Peter Robinson Wagner, M.B., B.S.—a son (Michael Robinson).

MARRIAGES

RICHARDS—HORDER.—On Saturday, February 3rd, 1951, at St. John's Church, Tunbridge Wells, Leslie George Richards, B.D.S., to Margaret Cecil Horder, M.B., B.S.

DEATHS

TURNER.—On February 5th, 1951, in Nuffield House, Guy's Hospital, Wing Commander H. M. Stanley Turner (" Uncle Harry "), M.B.E., M.D., of The Haven, Brookwood, Surrey.

WATSON.—On December 5th, 1950, Maurice Gustave Watson, L.D.S., R.C.C., of 26, Shepherd's Bush Green, London, W.12, aged 58 years.

EDS. {R.G. P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1634 10*th March* 1951 *Ninepence*

PASSIM

SINCE the end of the war our sense of national purpose has diminished. During war-time men and women were content, indeed were proud to put aside their personal needs, to surrender civil liberties, to assume new arduous tasks, to risk danger, to suffer inconvenience, discomfort, anxiety and separation ; nor was all this counted more than the price of victory, a price gladly to be paid, and proudly, as befitted citizens of a great nation. In peacetime few of these fine qualities can now be seen. All the comradeship of war is gone. Idealism of the people is an empty phrase. Staunch obstinacy in time of disaster has become recrimination in time of difficulty. Pride in our armed forces is labelled imperialism. Comradeship has become class warfare, idealism expediency. Unions and groups, trades and professions are first considered, England second. In the stampede to hurry salaries and wages after living costs national pride and public service become trampled underfoot. The blame for this display of greed and avarice, this lack of personal responsibility, is too readily laid elsewhere. The war, the Russians, the workers, the employers, the Government, the newspapers, anything or anyone is held to be responsible except ourselves. This . . . is peacetime, and this is why our peacetime may not long endure.

Doctors, dentists and nurses are more than purveyors of cures for sickness. They are also citizens. They not only have the rights of citizens but also the duties. As professional men and women they have the duty and the privilege, shared with other professions, of living lives as members of society which are a high example to their fellows. Doctors and dustmen, nurses and nursemaids, dentists and dockers are all neighbours. None has the right to criticise the other until their own record and example is beyond reproach. Our opinion therefore is that the greatest contribution to the common weal which we can make at this time is not to voice loudly our condemnation of other sections of society but to make the contribution of our own as effective as we can and to raise the standards by which we live as citizens of an ancient and proud land.

We offer our warmest congratulations to Mr. R. C. Brock on his award of the William Mickle Fellowship. This award, which is made by the Senate of the University of London, is " to the person, a graduate of the University, who has done most to advance medical art or science within the preceding five years, and has therein shown conspicuous merit."

Another Residents' Play has been produced and is reviewed later in this issue. It was worthy of its predecessors and if, as may be read in the correspondence columns, the Residents appreciated the support the audience gave them, we, for the audience, offer them congratulations on a play into which much time and effort and skill were put and which was thoroughly enjoyed.

We are very pleased to learn that the excellent exhibition of painting by Guy's men and patients is again to be held this year. We wish the organisers success in their venture which in previous years has been highly successful.

THIRTY CLUB DINNER, 1951

It has been found necessary to change the date of the Thirty Club Dinner from Friday, June 1st, 1951, as announced in the *Guy's Hospital Gazette*, to Friday, June 8th, 1951. Full details will be sent to members later.

Obituary

WING COMMANDER H. M. STANLEY TURNER, M.B.E., M.D.

(*Reprinted from Brit. Med. Journal*, 24*th Feb.*, 1951.)

WING COMMANDER H. M. STANLEY TURNER died in Guy's Hospital on February 5. He studied medicine at Durham University and Guy's Hospital, qualifying in 1899. After developing an interest in ear, nose, and throat surgery he became registrar at the Central London Ear, Nose, and Throat Hospital and assistant surgeon in the E.N.T. department of the Bolingbroke Hospital, Wandsworth. From his early days Turner was of an adventurous disposition. While he was a student he had taken part in the Græco-Turkish war and been made a Knight of the Royal Order of Saviour of Greece for his services. About 1910 he went out to the Falkland Islands as an assistant surgeon, and within a few years he was taking a leading part there in local government. He became a justice of the peace, president of the Board of Health, and Deputy Governor. In addition, he joined the West Falkland Mounted Infantry, and at the time when the German fleet put into the Falkland Islands near the beginning of the first world war he was in command with the rank of major, of the Falkland Islands Defence Force. The German fleet was later defeated by Admiral Sturdee's squadron, and for his valuable work in organising the defence of the islands Turner was awarded the M.B.E. Later he served in France with the 47th and 58th Divisions. In October, 1918, he transferred to the R.A.F., with a permanent commission. In 1919 he went to Egypt as principal medical officer at Middle East Headquarters, and he was able to play a valuable part in Egyptian medical affairs. He was appointed by the Egyptian Minister of Education to be a member of the selection committee of the University of Cairo, to which he was also an examiner in physiology. In 1921 he took the D.T.M. & H. (with distinction), and for a time he was the local secretary in Egypt of the Royal Society of Tropical Medicine. He was elected a fellow of the Royal Society of Edinburgh in 1925. In 1927 he returned to England and was placed on the retired list three years later. Though a Service man to his finger-tips, when he went into private practice in Surrey Turner became the personification of what the well-loved family physician should be—keeping up to date in his medical knowledge and gaining the confidence of all. His B.M.A. activities were many and varied. He served on a number of its committees in the 'thirties, including the Naval and Military Committee and the R.A.F. Sub-Committee. A Member of Council from 1930 to 1937, he became chairman of the Guildford Division in 1944, and was president of the Surrey Branch in 1947–8. In debate he showed himself always well informed, and his contributions were useful and to the point. One of a fast-disappearing generation, Wing Commander Stanley Turner was a very likeable personality and will be sadly missed. One of his sons and his daughter are in the R.A.F. To them and to his widow we owe our deepest sympathy.—F.A.B.

MAURICE GUSTAVE WATSON, L.D.S., R.C.S.Eng.

MAURICE GUSTAVE WATSON, L.D.S., R.C.S.Eng., died in the Middlesex Hospital on December 5th, 1950, after an attack of coronary thrombosis. His age was 58. He was the son of Jacob Louis Watson, who qualified from Guy's Dental School in 1900. Maurice Watson also entered Guy's and qualified in 1916.

In 1926 he married Miss Florence Ellen Cave who survives to mourn her loss.

He had many times visited France and other parts of the Continent of Europe and had many friends amongst his professional colleagues and on the other side of the Channel.

Maurice Watson was known and esteemed by many friends including members of the Medical and Dental profession.

The Scope of Neurosurgery

By MURRAY A. FALCONER

Director of the Guy's-Maudsley Neuro-Surgical Unit.

> "Indeed the existence of the operating specialist, as contrasted with the general surgeon, is justified only if the former takes advantage of his opportunities to contribute to the knowledge of the disorders he specially treats. When progress ceases to be made, through the intensive studies which the smaller field of work permits, there is every reason why the vagrant specialty should be called back under the wing of its parent, general surgery, from whom under no circumstances should it ever be permitted to wander too far."
> *Harvey Cushing*, 1913.

> "This new and rapidly expanding subject has budded off from general surgery and ardently attached itself to neurology . . . "
> *Harvey Cushing*, 1935.

FOR many years the realm of neurosurgery has generally been considered as lying in the fields of brain tumours and of cerebral abscesses, for these were the lesions on which the specialty was born and reared. They still form a large part of its work, but as operations on the brain became safe and the diagnosis of neurological disorders more precise, the scope of neurosurgery was extended. It now embraces other conditions such as spinal cord tumours and compressions, intractable focal epilepsy, various sequelæ of head injury, the relief of intractable pain, cerebral aneurysms and angeiomas, and even certain psychiatric disorders. It is still expanding. Some would include the surgery of peripheral nerves and of the sympathetic nervous system, but as these two fields do not require the same specialised methods as are needed for the brain and skull, they will not be included here. Instead my remarks will be confined to the surgery of the central nervous system, and particularly to its early development, its present scope, its organisation, and its future.

THE EARLY DEVELOPMENT OF NEUROSURGERY.

The birth of neurosurgery is generally considered to have taken place on November 25th, 1884, at the Hospital for Nervous Diseases in Maida Vale, when Rickman Godlee explored and removed a brain tumour (subcortical glioma) localised by Hughes Bennett solely on neurological signs, according to the theory of cerebral localisation recently enunciated by Broca, Fritsch and Hitzig, Ferrier, and by Hughlings Jackson. The removal was a partial one, and the patient unfortunately died a few weeks later of a wound infection. In the audience, when this case was subsequently discussed, were two young surgeons, Victor Horsley and William Macewen, and it is perhaps this event which inspired them to be the real pioneers of the new specialty. Horsley in 1886, only two years later, reported a series of 10 craniotomies performed at the National Hospital in Queen's Square, and a further two years later, with William Gowers, he reported the first removal of an accurately localised tumour from the spinal cord. In that same year Macewen from Glasgow reported 21 craniotomies for brain abscess with 18 astonishing recoveries. Neurosurgery had come to stay.

Next followed a long period of technical evolution, during which time the specialty came of age under the leadership of many men, of whom perhaps Cushing, Dandy, Frazier, and Elsberg in the United States, and Jefferson, Foerster, Vincent, de Martel and Moniz on this side of the Atlantic were outstanding. Foremost was Harvey Cushing. A surgical technique was elaborated which reduced mortality to a reasonable level, the various types of brain and spinal cord tumour were recognised and classified, and precise radiographic methods of tumour localisation such as ventriculography, encephalography, and arteriography, were introduced. Further, the principle was established that the surgeon who would operate on the brain "should be shouldered with the responsibility of acting largely on his own diagnosis," for too often disaster befell him who without much understanding of neurological problems operated on the brain at a site selected by another. And so a generation of operating neurologists has grown up, who have been trained in neurological methods, and have learnt how to evaluate before operation the various radiological and laboratory investigations, and after operation how to supervise the rehabilitation of their patients. In these respects the neurological surgeon has become a physician ; but the realm of neurosurgery is not a one-man preserve, the best results come from team-work among various specialists.

THE PRESENT REALM OF NEUROSURGERY.

BRAIN TUMOURS.

Many consider these the cream of neurosurgery, but that is a matter of opinion. This field is shared with the neurologist. The preliminary sifting and sorting of cases likely to be cerebral tumours is usually the latter's responsibility, but the responsibility for the final localisation of the tumour and the planning of the craniotomy flap to uncover it devolves upon the neurosurgeon. For help in deciding the localisation the neurosurgeon utilises various ancilliary aids, including electro-encephalography, visual field studies, and cerebrospinal fluid analysis. Neuroradiological methods, however, generally provide the greatest precision, and indeed some brain tumours cannot be localised in any other way. Straight X-ray films are sometimes helpful, but often resort has to be made to the " air studies " and carotid angeiography.

" Air studies " (or pneumoencephalography) is a generic term for two procedures, ventriculography and encephalography. In the former air (or oxygen) is injected into the ventricles via burr holes in the skull, in the latter by lumbar or cisternal puncture ; the patient's skull is then X-rayed in many positions to detect any distortion or other obnormality of the ventricular system. Until recently " air studies " were the principal neuroradiological procedure, but now percutaneous carotid angeiography is being performed even more frequently. In this procedure a needle is placed through the intact skin of the neck into the carotid artery, and then one of the diadone solutions employed for intravenous pyelography is injected into the artery, while X-rays of the skull are taken to outline the cerebral vascular tree in various stages of its filling. The presence, size, and site of a space-occupying lesion can be deduced from any shift or localised distortion of the cerebral blood vessels or from the demonstration of a " tumour circulation." Percutaneous carotid angeiography and " air studies " often prove to be complementary procedures, and frequently one will supply information not given by the other. Often they are both used. Vertebral angeiography has not yet reached the same level of practicability as has carotid angeiography.

The mortality rate for operation in all types of brain tumour should not now exceed ten per cent. It is natural that greater efforts are made to remove a tumour which is benign than one which is malignant, and hence it is desirable that facilities be available not only for the detailed histological examination after operation, but also for rapid examination while operation is in progress. A little less than half of brain tumours are benign. Among these are meningiomas, neurofibromas, the pituitary tumours, and the cerebellar astrocytomas, and the results of surgery in these are usually gratifying. Patients with malignant tumours can frequently be helped by a partial removal of the tumour and/or deep X-ray therapy. The ultimate results of course are usually dismal, but every now and then a patient with a malignant tumour verified histologically survives many years after deep X-ray therapy.

BRAIN ABSCESSES.

The treatment of these lesions is shared with the ear, nose and throat surgeon, the thoracic surgeon, and the general surgeon. Formerly the majority of cerebral abscesses were of otogenic or rhinogenic origin, but these particular abscesses are now much less common than they were a few years ago, a testimony to the value of modern antibiotic drugs in the treatment of aural and nasal inflammations. Instead a higher proportion of abscesses seen nowadays are metastatic to pulmonary and other infections, and many cases which formerly would have died and been written up as pyogenic meningitis, now recover from the acute meningeal infection and prove to have an underlying abscess. Many of these metastatic abscesses, which formerly were invariably fatal, now recover.

The older method of draining temporal lobe and cerebellar abscesses by tubes inserted from the infected mastoid region has now been superseded. Instead the present-day neurosurgical approach, pioneered by Vincent, Kahn, Pennybacker, and others, is to make a burr hole through non-infected territory over the abscess, and treat the abscess in the first instance by repeated aspirations, each time instilling a little penicillin and " Thorotrast." The " Thorotrast " outlines the abscess cavity and enables its size to be watched in repeated X-rays. In many cases these repeated aspirations alone will produce a cure, but in other cases the abscess will not shrivel into a scar, and it then becomes necessary to excise it as a tumour. In all cases the original focus of infection, whether mastoid antrum, frontal sinus, or lung, must be treated at an opportune stage by the appropriate specialist. The prospects for success with all types of brain abscess are good.

SPINAL CORD SURGERY.

Spinal cord tumours have long been recognised as an appropriate field for neurosurgery. The preliminary recognition and localisation of these cases is again the responsibility of the neurologist, but for precision in localisation resort is usually made to neuroradiology. In contrast myelography we have a procedure which will outline a spinal cord tumour with accuracy ; and the results of surgerv in these lesions are usually rewarded.

There are also other fields for spinal cord surgery. The field of tract and nerve root sections for intractable pain will be referred to later. In intervertebral disc lesions neurosurgery comes into close contact with orthopædic surgery, and it really does not matter much which coat the surgeon who operates on these lesions wears, provided he masters the technique of dealing with them.

TRAUMATIC CEREBRAL CONDITIONS.

The routine care of cases of concussion comes outside the immediate scope of a specialised neurosurgical team. Most of these cases make straightforward recoveries, and their number is such that, if they were all segregated in a specialised neurosurgical unit, they would swamp that unit to the exclusion of all other types of cases. The general run of cases of concussion, therefore, should continue to be treated in general surgical or accident wards, but the neurosurgeon should hold himself in readiness to see those cases which cause anxiety or exhibit complications. Such cases, of course, will include those suspected of extradural or subdural hæmorrhage, cases of compound fracture, and cases showing cerebrospinal rhinorrhœa. It is particularly important that these latter cases should be recognised promptly, for if left untreated the risks of meningitis and cerebral abscess are high.

THE RELIEF OF INTRACTABLE PAIN.

This is an important charge on neurosurgery. There are many different conditions characterised by intense and retractable pain, the cause of which either cannot be removed or is not known, and which cannot be relieved by medication. Included in these are many cases of tic douleureux, cases of malignant disease involving nerve limbs and plexuses, involvement of nerves in scar tissue, causalgia, painful phantom limbs, and the lightning pains of tabes. The principle followed in treating these conditions is to interrupt the pain-conducting pathways at an appropriate level, and there are a variety of procedures that can be applied, including section of sensory nerve roots, antero-lateral chordotomy, and even ablation of portions of the sensory cortex. The subject is a complex one, and we have still much to learn about it.

RELIEF OF MENTAL TENSIONS AND CERTAIN PSYCHIATRIC STATES.

Here is the field in which neurosurgery comes into close liaison with psychiatry. In some way, not yet understood, the frontal lobes of the brain seem responsible for maintaining the abnormal tensions and obsessions which beset many patients with mental illness. Various destructive operations on the frontal lobes often ease these tensions and obsessions when all else has failed ; they will also ease the distress and suffering caused by pain of organic disease without impairing the perception of pain as such. This is a field which is still being explored.

SUBARACHNOID HAEMORRHAGE.

This condition should be of special interest to Guy's men, for it was largely through the pioneering efforts of C. P. Symonds that its relationship to bleeding aneurysm came to be recognised. About 80 per cent. of cases are due to intracranial aneurysm, and the next common cause is leaking arteriovenous malformations. Customarily these cases are treated by bedrest and quiet, but the mortality rate for conservative management is high, averaging between 50 and 60 per cent. of cases in most general hospitals. Yet most cases of leaking aneurysm or vascular malformation can be located by arteriography, and are then amenable to a surgical attack either by carotid ligation or by a direct intracranial exposure. Recently I made a preliminary report of 40 consecutive cases of subarachnoid hæmorrhage investigated and treated surgically with 5 deaths. It is my belief that with increasing experience the prognosis can be improved still further, and that in intracranial aneurysms a wide field for surgery awaits tillage.

OTHER CONDITIONS.

In the past many attempts have been made to treat cases of focal epilepsy, which prove intractable to drugs, by excision of the affected cortex. These attempts usually have met with only indifferent success. Penfield's recent work, however, suggests that if these cases are investigated and treated in closest collaboration with an expert in electroencephalography, and particularly if at operation the excitable area of the cortex can be defined and delineated by direct electroencephalographic readings of the exposed cortex, good results can be obtained in a sufficient number of cases to make the attempt worthwhile.

In intractable cases of Meniere's syndrome, section of the eighth cranial nerve is a measure of proved worth, which in skilled hands carries little risk. It has certain advantages over labyrinthectomy for, when there is still useful hearing in the affected ear, it is often possible to divide only the vestibular half of the nerve and thus preserve the hearing (and incidently also the tinnitus). When no useful hearing remains in the affected ear it is better to section the eighth nerve completely, for this usually relieves the tinnitus also.

The field of orbital tumours is one in which neurosurgery shares with ophthalmology, for the superior or transfrontal approach of neurosurgery generally gives better access to the orbit than does the transpalpebral or lateral approach. More and more the management of these tumours is being entrusted to neurosurgeons.

THE ORGANISATION OF NEUROSURGERY.

The realm which neurosurgery has made for itself is thus a large one, and one which is still expanding. Close contact is made with so many branches of medicine that it is virtually impossible for one man to be expert in all its ramifications. Teamwork is therefore required among various different specialists, and it is this teamwork which makes for success.

Firstly, there must be the closest harmony between the neurologist and the neurosurgeon, and between the neurosurgeon and the psychiatrist. The neurosurgeon basically is the purveyor of a particular form of therapy, and although in the course of applying this therapy he gains considerable experience in the medical aspects of the diseases he treats, he does not gain the wide perspective in neurology or psychiatry of the specialist physician.

Secondly, there must be close teamwork with the various specialists in the ancillary diagnostic fields. I have outlined some of the contacts which neurosurgery makes with other specialties, and its dependence on neuroradiology, neuropathology, and neurophysiology. Its contacts with these specialties is a process of cross-fertilisation—for what it gives to other branches it gains in return.

Finally, for the successful conduct of operations skilled anæsthesia is required, and after operation the services of the physiotherapy department are needed for the re-education and rehabilitation of its patients.

THE FUTURE.

The father of modern neurosurgery, Harvey Cushing, in his charge to the infant specialty in 1913, avowed that its further existence was only justified if it continued to contribute to the knowledge of the disorders which it specially treats. There has been much progress since Harvey Cushing's time, not only in neurosurgery, but in practically all branches of medicine. The advances in neurophysiology, in neuroradiology, in the antibiotic drugs, to name but a few, are all contributing to the forward progress of neurosurgery. Harvey Cushing's work lay principally in the field of brain tumours, but we now have other fields besides this open to us, the fields of pain relief, of mental suffering, of aneurysms, and yet others. Here in the joint neurosurgical unit of Guy's Hospital and of the Bethlem Royal and Maudsley Hospitals we have great opportunities confronting us.

As Wilder Penfield recently (1949) said : " The promise of discovery may be found in other special fields as well as in the nervous system, but nowhere is the future so full of promise, the possibility of advance so unlimited, and the results of research so important to mankind."

About the Park

WE wonder if the standard of Clinical Lectures has ever been as consistently high as it is at present. In recent weeks lectures by the Hospital Senior Staff and by visitors have followed almost daily one after another ; and almost without exception they have been carefully prepared, well delivered and highly instructive. The variety of subjects has been as wide as they have been entertaining and whilst it would be invidious to make individual mention of those by the Teaching Staff we cannot refrain from referring to the two series at present being given—the one on " The History of Medicine," by Dr. H. C. Cameron, the other, an equally entertaining series, by Dr. Donald Hunter—We mention them solely to thank these authors, amongst many others, for their eloquent contribution to a particularly " Guy's " institution—the Clinical Lectures.

Another long-established Guy's habit—Post Mortem Demonstrations—is by no means of so consistently high a standard. Sometimes the demonstrations are excellent, but of late we regret to say they have been less good. A good Post Mortem demands team work and Ward Clerk, House Surgeon or Registrar, Honorary and Pathologist each have a contribution to make. It is particularly annoying to everyone when inaudible comments and private discussions are carried on by Post Mortem table, whilst the audience remain in unhappy ignorance of what it is all about. The microphones and loudspeakers which were installed to carry the voices of the more quietly spoken, the long 10-foot to the highest tier seem no longer to be in use.

March		ACADEMIC
		Exhibition. Surgical Department. " Rectal Bleeding."
12th	1.00.	Mr. Brock. Clinical Lecture. " Bronchial Carcinoma."
13th	12.00.	Mr. F. S. Warner. Dental Clinical Lecture. " The Oral Epithelium." Dental Theatre.
	5.15.	Dental Society Meeting.
14th	1.00.	Dr. Cameron. Clinical Lecture. ' History of Medicine "—*Continued.*
15th	1.00.	Mr. Wass. Clinical Lecture. " Chronic Pain in the Right Iliac Fossa."
	4.30.	X-Ray Meeting. Gordon Museum.
16th	1.00.	Dr. Douthwaite. Clinical Lecture. " Some Common Symptoms."
	2.15.	Medical Department. Dermatological Combined Round. Preclinical Classroom.
20th	1.00.	Mr. Blackburn. Clinical Lecture. " We Always Do."
22nd	1.00.	Mr. Kilpatrick. Clinical Lecture. " Tumours of the Bladder."
		SPORT
17th		ENGLAND *v,* SCOTLAND. (TWICKENHAM.) Rugby 1st XV. *v.* Gloucester. (Gloucester.)

Guy's Hospital Reports

THE Guy's Hospital Reports stand in relation to the *Gazette* much as does the House of Lords to the House of Commons. The latter carries on the every-day business of the people, sometimes well, sometimes badly; arguing, complaining, brawling a bit, but bringing the views and experience of all sorts of people to the notice of all sorts of other people. The former, however, is more remote, more authoritative, less hurried and less plebian. Its voices are those of experts and its contributions vary from those of great medical value to those of high literary quality. Occasionally there is a happy combination of both.

The current number of the Reports exemplifies our remarks well. We strongly commend it to your notice. There is a beautifully written appreciation of the late Dr. John Ryle by Sir Charles Symonds. This is followed by two short articles on Agnor Animi (the sense of dying) written by Dr. Ryle himself. Written in quiet language the character which made Dr. Ryle so well loved stands clearly forth. There follows some observations by Mr. R. C. Brock on " The Arterial Route to the Aortic and Pulmonary Valves. The Mitral Route to the Aortic Valves." This, though primarily of surgical interest, must be of considerable general interest to all who enjoy following the development of new ideas and watching them crystallise and become translated into new surgical methods of the treatment of disease. Ebstein's Disease (Anomaly of the Tricuspid Valve) is discussed in a paper by Dr. Charles Baker, Dr. W. D. Brinton, and (the late) Dr. G. D. Channell. Dr. Geoffrey Reynolds reports on a case of this condition diagnosed clinically. He also reports on a spontaneous vasovagal attack which occurred during the recording of an electrocardiogram. A brief report by Dr. F. J. Covill on Cancer of the Breast and Pregnancy concludes this edition of the Reports.

The present Editorial Committee of the Reports will we feel be of considerable interest to our readers and we publish it below.

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R. C. BROCK, M.S.
Associate Editor :
W. N. MANN, M.D.

Assisted by

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P. M. F. BISHOP, D.M. (Endocrinology)
E. J. CRISP, M.B., B.Ch. (Physical Medicine)

The Residents' Play, 1951

THE critic of the amateur stage has an invidious task ; he must be honest in his remarks and yet temper any adverse comment to the susceptibilities of his friends, the players, the producer, the authors, the musicians and the scene shifters. Your critic, under the cloak of anonymity, will act the unloved part of Candid Friend, praising where he should and blaming where he must.

First to the plot. In the past the plot under the pen of the embarrassed author has acted like a ureteric catheter in the hands of a beginner, refusing to go its intended way, coiling itself unexpectedly in all directions, and finally expiring in an undignified tangle down the sink. The authors, the veteran John Trounce and Geoffrey Hammond, have avoided some but by no means all the knots in which their predecessors so often found themselves ensnared. One would say that there was perhaps too much plot and a drastic pruning of the radio-active isotope tangle would have been an advantage.

The curtain rises on a day at the races. Two shady bookies, Dr. Hauntz (Mr. Van't Hoff) and Dr. MacDrain (Mr. Robinson), are seen shouting the odds and eking out the slender emoluments of consulting medical practice. There are the usual hangers-on of the course. A professional strong man, Dr. Disc (Mr. Dwyer) invites the onlookers to ". . . build up your muscle or whittle your bustle" and does painful things to an iron bar. Sister Hoss (Mr. Hart) is taking time off from night duties to tell fortunes. It is a pity that we see no more of these very well portrayed characters during the rest of the evening. Mr. Flecky (Mr. Thomas) and Dr. Flaker (Mr. Steer) lose their all when an outsider romps home and the bookies welsh.

In the next scene, the Department of Medicine, Hauntz and MacDrain give us a song, completely in the right tradition :—

Hauntz.

I am a consulting physician,
Working the whole day long.
If you aspire to my position,
Come listen to my song.
Only by practice you're successful,
Only by charm and being bright.
You must remember it is dreadful
If you forget to be polite.

Always wear a clean collar
A new one is worth half a dollar.
See that your cuff links are outside your sleeve
Know when to take your leave.

MacDrain.

By nature I'm really didactic
Enjoying the power which is mine.
To play with an antibiotic
Has always been in my line.
Giving my orders and directives
To those who are under my spell.
My colleagues I lash with invectives
I curse them and blast them to Hell.

Always beat up the Housemen
They must be turned into yes-men.
See that the ward clerks are thrashed every day
Heed what the registrars say.

They are engaged in doping a racehorse, GumSaline, played by Messrs. Williamson and Reader, with Cortisone. They are interrupted by the entry of Professor Nagy, a truly central European figure, complete with long black beard and frock coat, and Sir John Boneydeare (Mr. Wilson). The make-up of Dr. Hauntz and Sir John were triumphs and enormous credit must be given to Messrs. Barrett, Buttery, Evans and Sykes, whose concatenation of names fit them equally well to become a firm of solicitors. The foreign professor, and how foreign he was, had come to Guy's to obtain by hook or by crook the formula of the secret dope, to ginger up the masses of his home town and convert them into super-Stakhonovites. Alas, he thinks, and thereby hangs the plot, that the secret is in the possession of Horace Greaser (Mr. Baird), Sir John's charming H.P. Seldom have these tired old eyes rested on so charming a hero as Mr. Baird gave us. He is in love with the handsome radiographer, Ann Ode (Mr. Kendall), and his affections are returned with the abandon of a girl whose tape will never again read 24 and 34 inches on waist and bust.

The third scene is laid in a ward sitting room. Sister Fillet (Mr. Watson) and her charming little song are destined to be long remembered in the annals of the Play.

What shall I do ?
The phone's gone wrong
Two plumbers in the sluice
Means a dozen ere long.
I've lost my sheets
Can't find a nurse.
Dear, dear, dear,
Could it be worse ?

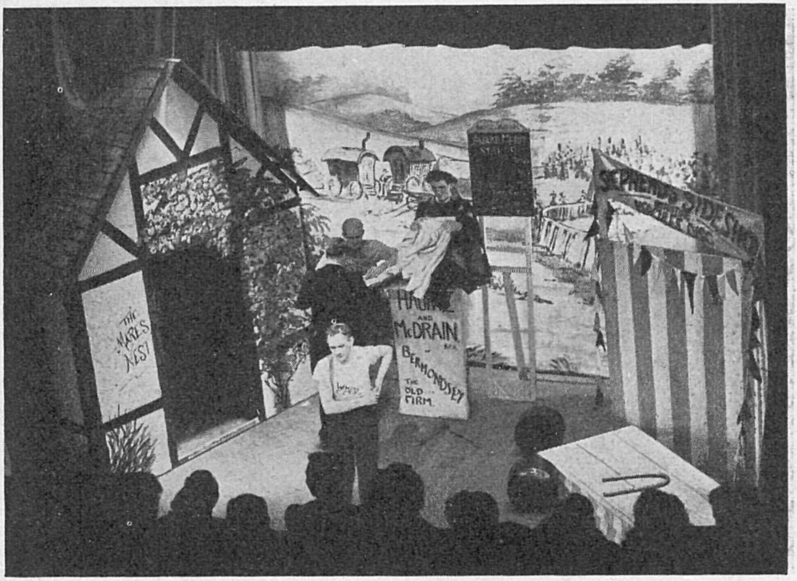
Love has taken my Black Belt,
Block has taken by strings.
The Senior Pro's ; nobody knows,
And the Juniors, poor little things.
You can't get much from a shy bo-peep
When she's only a sheep that's really asleep,
Or a frightened wandering lamb,
Or a frightened wandering lamb.

Meanwhile Nurse Sheila Gree (Mr. Aldridge) whose Spanish eyes and willowy figure have been spurned by the handsome Greaser for the more amply endowed Ann Ode, enters into a sinister compact with the foreign professor to kidnap Greaser. She plies him with a cup of drugged Horlicks, and he falls to the floor in a coma.

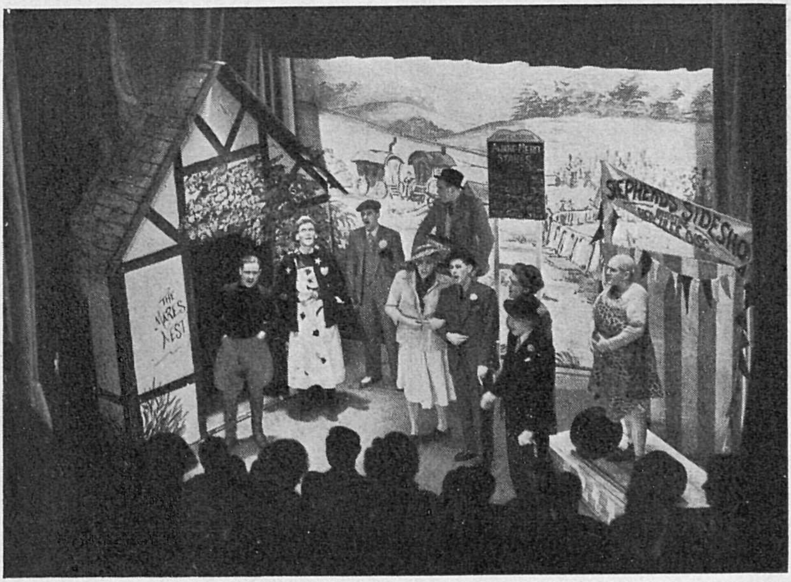
The second act takes us to the X-ray Department, where three radiographers, the robust Ann Ode, Milly Amp (Mr. Tayler) and Ivy Pea (Mr. Hunter) are discovered washing their smalls in the tank. They are joined by Dr. Thrills (Mr. Williams), another tour-de-force from the above-mentioned firm of solicitors. Enter Dr. Starter-Paine (Mr. Mills), fresh from the byre, if fresh is the right word, straw in his hair, and coated with mud. He is in great distress ; his assistant Dr. Fate (Mr. Reader) has swallowed a radio-active drink, designed by the villainous professor to be drunk by Sir John, for reasons which after prolonged deliberation your critic was quite unable to fathom. Perhaps the authors wanted to have a good, loud bang, which they certainly achieved when the unfortunate victim disintegrated in an explosion. This scene was one of the poorest of the evening, suffering from too much plot, and again characters were brought on for a short time never to make another appearance, save for the radio-active cloud which is all that now remains of the unfortunate Dr. Fate.

A short interlude, a frontier post in Ruritania, leads to the third scene, in the country of Ruritania, an inn and yokels. Zoltan (Mr. Goulding) the landlord and Janos (Mr. Ellis) a farm bailiff, are discovered resplendent in those costumes which, being a mixture of South American and Russian, one knows at once to be Ruritanian.

Zoltan has the most foreign teeth, they are magnificent, they flash and are so obviously wicked . . . and foreign. Still on the track of her abducted lover, Ann Ode enters in what appears to be a Ruritanian maternity gown, followed by the professor and Sheila Gree.


THE MARES NEST
HAUNTZ AND McDRAIN BERMONDSEY THE OLD FIRM
SEPHERDS SIDESHOW

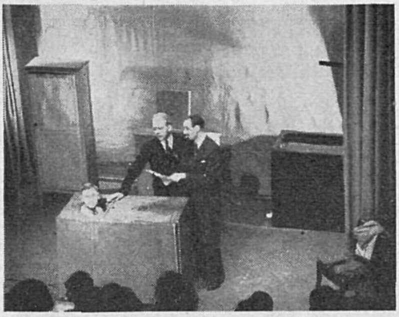
Hauntz, MacDrain, Disc and Sister Hoss, putting a shirt on a horse.


THE MARES NEST
SEPHERDS SIDESHO

Finale of Scene I. (Newmarket Heath).

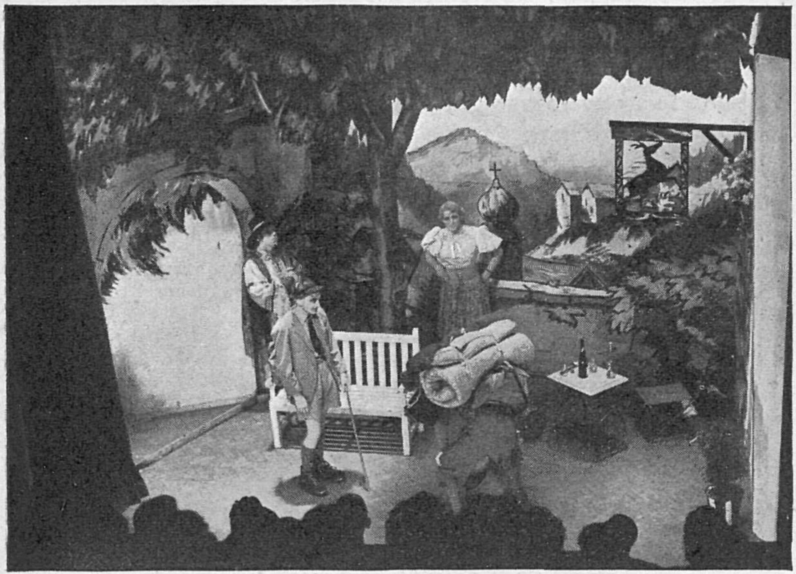
NOTICES
POLAND

A scene in the Department of Medicine.



Drs. Thrills, Starter Paine and Fate.

Prof. Nagy, Boneydeare and Sister Fillet.



The Ruritanian frontier, with Boneydeare, Ann Ode and Zoltan. Observe the overburdened Dr. Flaker.

FINALE
Including John Trounce, George Scott, Geoffrey Hammond.

Any doubts we may have enteretained about the geographical position of Ruritania are immediately settled by a delightful song and dance.

In the Pustza, there I plough and sow,
With my oxen walking to and fro,
When the yellow thrush has lost its song,
In my lover's grave I'll lie ere long.

From her horse my sweetheart fell and died,
Now alone across the plain I ride.
When the stars shine in the midnight sky,
Then I hear the wind bring back her cry.

The villains are confounded by the appearance of the indefatigable Sir John, hot foot on the track of his missing H.P., accompanied by Flaker. They have made the long trek from the Borough, and show unmistakable signs of exhaustion, not unpardonably. A drink revives them sufficiently to give one of the best songs of the evening.

Sir John.

I am Guy's most senior Physician,
Yet I'm much more than a mere clinician.
I've a finger in all pies,
I'm the one to criticise,
And I'll stand no puerile opposition.

Dr. Flaker.

My teaching rounds are often a collusion
Of common sense and mystical delusion.
Finding that when all's been said,
The subject's muddled in my head,
My thoughts are in a terrible confusion.

The villainous Sheila Gree has recourse once more to the poisoned cup, and when our heroes awake, they are bound hand and foot, and subjected to torture. The gallant Greaser defies them : " I am Rugby, Oxford and Guy's," he says with simple pride. " I am Roedean, the Windmill and sometimes St. Christopher's," mocks the horrible Sheila, and redoubles the torments. Eventually it dawns on the professor that he has been fooled, and the curtain falls as all assembled set out hot foot back to England, with the exception of the two male Ruritanian types who are left tied up on the floor.

In the last scene, as should be, all villains are suitably unmasked and dumbfounded, true love comes into its own, and the somewhat involved plot is unravelled.

Of the plot, then, we can say that we saw too much. Of the character playing, Sister Fillet, Dr. Hauntz, Sir John Boneydeare and Dr. Thrills, one can truthfully say that never has such consistently good acting been achieved on the boards of the Physiology Theatre. The dialogue had the merit of being funny and clean, and it brought no blush to your critic's maidenly cheeks.

The music and lyrics by Geoffrey Hammond, helped out by Dr. Hills, were charming. Here and there, as in the songs above quoted, they excelled, but they were undoubtedly handicapped by the rather hoarse bunch of crows who had to put the songs across. The production was slick and competent in George Scott's capable hands, the lighting and effects were better than usual, and we must praise very highly the scenery and make-up artists.

At the pianos Geoffrey Baker and Michael Vickers provided the accompaniments and entertained the audience in the intervals between scenes, which this year were admirably short thanks to the valuable work of the Guy's Theatre Club, which played a prominent part in all the off-stage activities.

Thank you Residents ; thank you John Trounce, Geoffrey Hammond, George Scott and all the others ; thank you all very much. It was a very good play, the best since the war.

CANDID FRIEND.

PHOTOGRAPHS.

A complete set of all the photographs taken recently at the Residents' Play will be on show as soon as possible in the Entrance Hall of the Medical School. Those reproduced in this number of the *Gazette* represent a small selection. Copies will be obtainable, price 2*s*. 6*d*. and 3*s*. 6*d*. each, according to size.

Correspondence

Residents' Play

SIR,—I should like to express the gratitude of the Residents to all those who so kindly contributed to our Play this year. Their generosity has, I think, enabled us to cover our expenses.

We should also like to thank all those who worked so hard behind the scenes, and those who did our make-up.

Yours, etc.,
W. VAN'T HOFF,
President of Residents.

Darkest Africa

SIR,—I thought you might be interested in this letter as a sample of what comes to the Out-Patients' here. I think it compares very favourably for entertainment value with those that arrive at the Ante-Natal Clinic at Guy's. Incidentally, the woman was not pregnant. Would you please *return the original letter.*

P.O. Box 2,
Insu,
Gold Coast.

From Darkest Africa,
Yours, etc.,
O. F. CONRAN, L.R.C.P., M.R.C.S.

The letter reads as follows :—

From Peter Egesi : Wife,
Samreboi Town.
10 *Jan.*, 1951.

Dear Sir,

With infinite pleasure to submit for this brief note ; in order to explain to you fully how this sickness is worrying my wife.

It was since five months I am under pregnancy. Within two months of the pregnancy I witness some menstruation or monthly visitation rushing out from me.

Since the mentioned months had gone by, the womb could not appear even up till date, and I am always in sickness. Every month I should witness the menstruation small. Thanks.

I remain,
Yours sincerely,
EGO PETER.

A further letter read ;—

To the Docter

SIR,—I have the honour most respectfully to submit you this my humble note. I will explain to you wholely how I used to fill cold from 5 p.m. to 8 p.m. and from 4 a.m. to 6.30 a.m. Before it will starting, then I use to corfe inside my heart. Daily my heart and my waste always find me trouble. As due to the heart, it seems as some one put stone inside my heart, and my waste used to give the most trouble. Though I am alive, yet I am not pleased with this my condition.

I have the honour to be, Sir,
I am your obedient servant,
THEME.

PUPILS' PHYSICAL SOCIETY.

The joint meeting with St. Thomas's Hospital will take place on Tuesday, March 20th. Will any students who are interested in attending give their names to Dr. J. Trounce. The number will be limited to thirty.

Sherlock Holmes and Dr. Watson

A MEDICAL DIGRESSION

By MAURICE CAMPBELL, O.B.E., M.D., F.R.C.P.

Reprint of a pamphlet (now out of print) which was elaborated from a Clinical Lecture given at Guy's and a paper read to St. Bart's Abernethian Society in 1934.

(*Continued*)

III.—WATSON'S PRACTICE; HIS SERVICE IN THE SOUTH AFRICAN WAR; AND HIS SECOND MARRIAGE

WATSON'S accurate medicine, makes it interesting to review his student career and subsequent practice. Born about 1852, he must have started as a medical student at St. Bartholomew's Hospital about 1871, and it was then presumably that he played rugger for Blackheath (The Sussex Vampire). He qualified M.B., B.S., about 1876, and we know that Stamford was a dresser under him at Bart.'s, so he must have been house surgeon or obstetric resident. As he took his London M.D. in 1878, house surgeon seems less likely, and when we find that he might have been obstetric resident to that great man Matthews Duncan, our choice seems almost inevitable (The Study in Scarlet).

After going through the army surgeon's course at Netley, he was posted to the Northumberland Fusiliers in India. On reaching Bombay he found his regiment engaged in the second Afghan War and joined them at Candahar, but was later attached to the Yorkshires and was wounded in the shoulder at the battle of Maiwand (July, 1880). He was in hospital at Peshawar, and had nearly recovered when he got enteric fever; this was a severe attack, and led to his being invalided out of the army, so that he arrived back in England towards the end of the year.

It was under these conditions that he started the famous partnership with Holmes at Baker Street. After the Study in Scarlet (1881), Watson decided to write an account of the case, though it was not published till six years later. By 1883 he had become Holmes' "intimate friend," and assisted Holmes and writing accounts of his cases seems to have been his main interest and occupation (The Speckled Band). Like many men without a regular job, he spent much of his time and money following horse-racing (Shoscombe Old Place) and dabbling in stocks and shares (The Dancing Men); but he still kept up his medical interests, and had the presence of mind to save the life of the unfortunate Mr. Melas, who was suffering from carbon monoxide poisoning (The Greek Interpreter, about 1885). In 1887 he was hurriedly called to Lyons as Holmes was ill, and was relieved to find that there was nothing more seriously wrong than a breakdown from overwork (The Reigate Squires), for which he arranged for Holmes to have a rest at Reigate with Colonel Hayter, who also had been under his professional care in Afghanistan.

In the Sign of Four (1888), Watson, had been reading the latest text-book of Pathology, and was able to give a decided opinion about the absence of valvular disease, after listening to Sholto's heart. The fact that he carried his stethoscope with him showed that he liked to take any opportunities of medical work that came his way, and his familiarity with Dr. Trevelyan's monograph on Obscure Nervous Lesions showed that he was still reading widely (The Resident Patient).

In July or September, 1888, Watson became engaged to Miss Morstan, and this naturally brought an end to the Baker Street ménage and led to his settling down to earn his living. In February, 1889, shortly after his marriage, he bought a practice in the Paddington district, and by March he had started work, as Holmes deduced from the smell of iodoform, the black stains of silver nitrate, and the bulge in the side of his top hat where he secreted his stethoscope (A Scandal in Bohemia).

Old Mr. Farquahar, from whom he had purchased it, had at one time an excellent general practice, which had shrunk from twelve hundred to three hundred a year owing to his age and an affliction like St. Vitus's dance. Watson was sure that with his energy he would build it up again, and certainly for the first three months he was kept very busy. When Holmes visited him one morning in June he was reading the *British Medical Journal* at breakfast, and was able to hand over his work for the day to his next-door neighbour, whose practice Holmes deduced from the wear of the steps had been much less successful than Dr. Farquahar's (The Stockbroker's Clerk). The same month he took another day off in the West of England (The Boscombe Valley Mystery).

In July again, although he had had a busy day, he was able to go down with Holmes to Aldershot (The Crooked Man) and to Woking (The Naval Treaty). By August his practice had steadily increased, in spite of these interruptions, and he had several patients among the railway staff at Paddington Station, through one of whom he introduced Holmes to the adventure of the Engineer's Thumb.

In September he was staying with Holmes for a few days as his wife was away with her aunt (The Five Orange Pips), and in October he was still there, and must have taken his holiday and spent it down on Dartmoor (The Hound of the Baskervilles). Mrs. Watson was evidently away much longer than was expected at first, and probably this was the beginning of her illness—indeed, it is not clear if she was back before January, 1890 (The Valley of Fear), though this may have been a second absence.

In 1890 Watson seems to have been busy with his practice, for in A Case of Identity he had not seen Holmes for several weeks, and when he was sent for in Holmes's supposed illness he had not seen him for some time and knew nothing of the case (The Dying Detective). In October he was able to spare an afternoon, but that was Saturday (The Red-Headed League); indeed, Watson was so busy with his practice during this year that he had records of only three of Holmes's cases (The Final Problem).

Early in April, 1891, Watson was living with Holmes again, and was able to go down to Winchester (The Copper Beeches). Evidently Mrs. Watson was away again and was again forced to stay away longer than was expected, for later in the month when Holmes called on Watson late at night she was still away. Watson said that his practice was quiet and could easily be left to his neighbour while they went to Switzerland to avoid Moriarty (The Final Problem). After such a happy marriage it seems impossible that Mrs. Watson could have been away so much unless her health had broken down, and Watson's loss of interest in the practice after the successful year in 1890 can best be explained this way.

When Holmes returned in 1894 he found Watson settled down in practice again, this time in Kensington, and evidently successfully, for Watson says, "All day as I drove upon my round" (The Empty House). Sherlock Holmes referred to the death of Mrs. Watson, remarking that hard work was the best antidote to sorrow; she must have died about 1892, and most probably from tuberculosis. One might guess at first that she had inherited her father's liability to arterial disease and died from angina pectoris, as he had in his early forties (see page 12); but she was only thirty-two when she died, which makes this unlikely. Further, her appearance and her tendency to blushing and pallor (The Sign of Four) are more compatible with the tuberculous than with the anginal diathesis, and a sudden unexpected cardiac death would not account for her long absences from home. It is equally likely that she inherited her weakness from her mother, who died when Mrs. Watson was a child, probably from tuberculosis, the most natural cause for a mother and daughter both dying young. Her first long absence from home was in September and October, and probably a chill in the beginning of the Eyglish winter led to a cough and signs in the lungs.

Within a short time of Holmes's return we find that Watson had given up his second practice and was back in his old quarters at Baker Street (The Norwood Builder). The call to the old life was too strong, and he had sold his practice in Kensington at a very good price to a young Dr. Verner—a distant relative of Holmes. From 1894 to 1899 there were a steady stream of adventures in which Watson collaborated, and accounts of these cases from Watson's pen, most of them being published in The Return of Sherlock Holmes. This seems an appropriate moment to consider the vexed question of the position of the famous lodgings presided over by Mrs. Hudson.

221*b* BAKER STREET.

There is no tablet on the wall of 221*b* Baker Street, to commemorate the long residence of Holmes and Watson, with interruptions from 1881 to 1903. Indeed the very site is uncertain, but many of the stories contain indications that it was somewhere in the middle half.

" Holmes," said Watson as he stood one morning in their bow window looking down the street, " here is a madman coming along." He was a man of fifty, tall and portly, with a black frock coat, but his actions were in absurd contrast to the dignity of his dress and features, for, he was running hard with occasional little springs (The Beryl Coronet). The distinguished banker was coming to see Holmes and had arrived at the Inner Circle Station, so this shows that their lodgings were not very near the upper end of Baker Street. Moreover, Watson used the Wigmore Street Post Office and not the one in Baker Street itself, as he would have done if living at this northern end.

" It was a bitter night, so we drew on our ulteres and wrapped cravats about our throats. Outside the stars were shining coldly in a cloudless sky. Our footfalls rang out crisply and loudly as we swung through the doctors' quarter—Wimpole Street, Harley Street, and so through Wigmore Street into Oxford Street. In a quarter of an hour we were in Bloomsbury " (The Blue Carbuncle).

" A minute later we were in the street and walking for home (from Brook Street). We had crossed Oxford Street and were half-way down Harley Street before I could get a word from my companion " (The Resident Patient).

" ' Your hat and boots, Watson, quick. Not a moment to lose.' He rushed into his room in his dressing gown and was back again in a few seconds in a frock-coat. We hurried together down the stairs and into the street. Dr. Mortimer was still visible about two hundred yards ahead of us in the direction of Oxford Street " (The Hound of the Baskervilles).

These three quotations show that 221*b* Baker Street was not near the lower (Oxford Street) end, but do not help us to place it more closely. We might expect this ,for a man is so familiar with the neighbourhood of his own home that he is unlikely to describe it in any detail.

But there is one more precise reference when they were returning by an unusual route to avoid observation ; Holmes stopped the cab at the corner of Cavendish Square and passed rapidly through a network of mews and stables, the very existence of which Watson had never known. They emerged into a small road lined with old, gloomy houses, which led them into Manchester Street, and so to Blandford Street. Here they turned down a narrow passage, passed through a wooden gate into a deserted yard, and opened a back door (The Adventure of the Empty House). They were in Camden House opposite their own quarters and able to watch them unobserved.

The turn from Blandford Street might have been to the north into Blandford Mews or to the south into Kendall's Mews. Anyone who walks along the two will find the description of the deserted yard more apt for Kendall's Mews ; and Watson wrote of turning down, which again makes the turn to the south more likely, because the two mews run parallel to Baker Street, and turning *down* this is certainly to the south, for the northern ends of both Baker Street and Wimpole Street are *upper*.

This gives a choice of the block of ten houses now numbered 17—35 on the west side of Baker Street, presumably the 27—35 half of this block, as otherwise Holmes would have been more likely to enter Kendall's Mews from the south than from the north end. Number 27 is a story higher than the others, and so it caught my eye, and I noticed that it is still in the occupation of Hudson Brothers. Clearly this was the house, and Mrs. Hudson, when she ceased to be landlady and became housekeeper for Holmes on his retirement in 1903, left the lease of her house to her sons, who have built up this business.

Mr. Roberts states in a footnote (*loc. cit.*, p. 14) that Dr. Gray C. Briggs, of St. Louis, deduced that the house in which Holmes and Watson lived was 111 Baker Street (*see* F. D. Steele, " Sherlock Holmes ") ; but I have been unable to obtain this paper, so do not know on what evidence this identification was based. Mr. Blakeney, also in a footnote (*loc. cit.*, p. 49), thinks this is certainly wrong, and, using the directions from the Adventure of the Empty

House, deduces that it must have been 45 to 51 or 29 to 35, and states that local authority accepts 49 as the site. I have already given reasons for choosing 27 to 35, and to this extent agree with Mr. Blakeney, but he must have turned up into Blandford Mews instead of down into Kendall's Mews.

As though to complicate matters further and to hide the identity of such an important historical landmark, the numbers in Baker Street were changed twelve years ago. I am indebted to the postmaster of the Western District P.O.—the Wigmore Street office which Watson used—for the information that the ten houses at present numbered in odd numbers 17, 19, etc., to 35 (from south to north), used to be consecutively 79 to 70 (from north to south); 27 was therefore 74. Now Watson must have had some reason for writing 221*b*, and surely it is not too fanciful to suppose that to disguise 74 he said 74 × 3 = 222 = 221*b*. Holmes had lived in Montague Square when he first came to London and must have been very attached to the neighbourhood, for 74 was the house in Baker Street as near as any to Montague Square. After this digression we must return to Watson's career.

WATSON'S SERVICE IN SOUTH AFRICA

We are nowhere told that Watson took part in the South African War, but the importance of deduction was the main scientific thesis of Holmes, so it is likely that Watson would have left us without problems to employ our own faculties of deduction? Only too often he emits all record of his own life except in so far as it is pertinent to the cases of Sherlock Holmes, and we are lucky in having so many details of his early career to explain how they come to share rooms in Baker Street.

As an old army doctor without any real ties Watson could hardly have done less than offer his services to the War Office, as he did in the Great War when he was much older (His Last Bow). His love of adventure was so keen that he was never happier than when he was setting off on some exciting chase with his old army revolver in his hip pocket, and it would make him anxious to be out in South Africa and would easily overcome any difficulties there might have been about his re-engagement, possibly as a civil surgeon. He was only 47 and not too old for medical service, even if he could not be a combatant.

Another argument pointing the same way is that, though he had given up the Kensington practice in 1894, he started again towards the end of 1902 (see later). It would have been difficult to do this after such a long interval as eight years if he had been entirely without medical experience during this time, but very natural if he had just returned from South Africa and found that medicine still made a strong appeal to him. And, as we shall see later, it was to surgery that he returned, and only his work in South Africa would have made this possible.

From internal evidence it was very much in Watson's mind, as The Three Garrideps of June, 1902, is dated " shortly after the conclusion of the South African war " (peace was signed in May), and The Blanched Soldier of January, 1903, " after the conclusion of the Boer War." From the similarity of style I can imagine that Watson really wrote " The History of the South African War," though it is published under the *nom de plume* " Conan Doyle."

But the decisive appeal is to dates, and these prove it in a way that has not been realised. Except for 1891–94, when Holmes was away and supposed to be dead, there are some records for nearly every year, making any other gap very significant, and the only other gap is for the three years between the summer of 1899 and June, 1902. War was declared in South Africa in October, 1899, and peace was signed in May, 1902, and the coincidence of these two periods first made me realise that Watson had served in the war.)

I am aware that Mr. Blakeney (*loc. cit.*, p. 105) places The Adventure of the Priory School in May, 1901, but in my view the events took place in May, 1899; the Duke of Holderness was married in 1888; as he was not young and already had an illegitimate son, he would be very anxious for an heir as soon as possible, so that Lord Saltire was probably born in 1889; he was ten years old when he went to school, and had only been there a few weeks, *i.e.*, 1899. Mr. Roberts relies on the statements that the Duke of Holderness had been Lord Lieutenant of Hallamshire since 1900, and that May 13th was on a Monday in 1901. But the former was an extract from a book of reference, and Watson would use the current year-book when he edited the story, for the Valley of Fear tells us that he was very particular about his reference books being up to date. Was Watson such a careful editor that we can rely on his being accurate about the latter when he spoke of Monday, May 13th ? I fear not, for in The Sign of Four a letter is dated July and a few pages later Watson says it was a September evening ; and the Red-Headed League contains the same confusion between June and October.

The following considerations seem to me conclusive about Watson having been absent during this period. Watson makes one categorical statement, viz., " Holmes was in active practice for twenty-three years, and during seventeen of these I was allowed to co-operate with him and keep notes of his doings " (The Veiled Lodger) ; the figures are too precise to be rough measures—1903 marks the end of this period, for The Creeping Man in September of that year is described as one of the very last cases handled by Holmes before his retirement, and Watson was with him then. In 1907 he had been living quietly in Sussex for some time (The Lion's Mane), and Watson had passed almost beyond his ken.

Holmes was thought to have been killed in his struggle with Moriarty by the Reichenback Falls on May 3rd, 1891. He reappeared in London in April, 1894, explaining that he had climbed up the side of the precipice after Moriarty's death and had thought it wise to remain in hiding for a time ; he had therefore been travelling in Tibet and Persia and had been away three years. Adding these three to the twenty-three years of his practice gives us 1878–1903. The Musgrave Ritual, when Holmes was living by himself in Montague Street, was his third case, and other evidence fits in with this being in 1878 ; Holmes had left Cambridge* at least two, and certainly not more than four, years before.

Watson did not join Holmes till 1881 (The Study in Scarlet), so that if he had been with him till 1903, except for the three years of Holmes's absence, they would have worked together for twenty years ; but we are told it was only for seventeen. No direct statement is made as to when these three years were, but, as no cases are recorded from 1899 to June, 1902, this clearly was the period, and there seems no more likely explanation than that he was out in South Africa.

WATSON'S SECOND MARRIAGE AND THIRD PRACTICE

The problem of Watson's second marriage is baffling from lack of facts ; as Holmes would have said, it is a mistake to theorise in advance of your data, but here, unfortunately, we are not likely to get more data and must do the best we can. Watson seems to have been a man who was quite satisfied with his adventurous life with Holmes, and only turned to the humdrum round of practice when marriage made a regular income necessary. The following are the pertinent facts :—

1. In June, 1902, Watson was shot at and wounded in the thigh (The Three Garrideps).
2. In September, 1902, Holmes managed to break off the engagement of Miss Violet de Merville to Baron Gruner—one of the most unpleasant characters in the whole series of stories (The Adventure of the Illustrious Client).
3. In January, 1903, Holmes was forced to write his own account of the adventure, because, as he said, the good Watson had recently deserted him for a wife (The Blanched Soldier).

Mr. Roberts (*loc. cit.*) suggests that Violet de Merville was Watson's second wife, arguing that in making subsequent inquiries about her health Watson, with chivalrous interest in those who were in trouble, would have been led much further; and that his experience in Afghanistan would have given him a point in common with her father, Colonel de Merville " of Khyber Fame," and would make the engagement less unlikely than it might seem from the exalted circles in which the de Mervilles moved.

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* *I acknowledge with regret that Holmes was at Cambridge. He was bitten by Trevor's bull dog " on the way to the chapel " ; the bull dog would not have been allowed inside college, therefore Holmes was living in lodgings ; it was sometime during his first two years, therefore he was at Cambridge ; for during those years Oxford (with her greater wisdom) would have insisted on his living in College.*

Mr. Blakeney in his appendix (*loc. cit.*) attacks this view without suggesting any alternative, mainly on the following grounds :—

(*a*) She was young, and Watson was fifty—a rather inadequate reason.

(*b*) The social gulf would have made such a marriage very unlikely in 1902.

(*c*) Watson makes no mention of it in writing the story, and there is no reason why he should not have given the facts as he did when he became engaged to Miss Morstan.

(*d*) Had Watson married Violet de Merville he would not have roused unhappy memories by recording such unsavoury an incident in her life.

The last two reasons seem conclusive, and there are two others. Watson must have married in or before December, 1902, and, considering what happened in September, it seems quite impossible that Miss de Merville should have married anyone as soon as this. The second reason is less important in itself, but gives the only clue to the baffling problem of who his second wife was.

In September the story opened with Watson and Holmes in a Turkish bath, and Watson had already moved to his own rooms in Queen Anne Street; it must have been recently, for in June he had been sharing the old rooms with Holmes. No one with Watson's limited means would have made this move except with a view to practice, and it is unlikely that he would live there instead of having a consulting room unless he had already made up his mind to get married. It would take some time to take this decision, to get a house, and to move in, so that by August at the latest Watson had settled to return to practice, and probably was engaged to be married—indeed, this was the most likely stimulus to the resumption of his medical life.

In June, when " Killer " Evans was disturbed in his secret hiding place with a large supply of forged bank notes, he shot Watson in the thigh. Watson felt a sudden hot sear as of a red-hot iron, and the next moment Holmes crashed his pistol down on Evans's head and sent him sprawling on the floor. Watson was helped to a chair by Holmes, who ripped up his trousers with a pocket knife, and Watson felt it was worth a wound to know the depth of loyalty and love which lay behind the cold mask, for there were tears in Holmes's eyes. Naturally, after this emotional scene he tried to make light of the wound and called it superficial, but he must have been laid up for some weeks and must have needed a good deal of attention.

Except Mrs. Hudson, who must have been quite elderly by this time, there was no one to look after Watson at Baker Street while he was confined to bed, and he must have had a nurse or entered a nursing home. He was fifty and, like most rugger players who had given up exercise, was probably rather stout, so it is quite likely that the wound was troublesome and kept him in bed for several weeks, through most of July. Knowing his sentimental nature, what was more likely than an engagement to his nurse and a resolve too resume practice and to take a house in Queen Anne Street, after talking it over with her during his convalescence? As these decisions were reached by August, there hardly seems time to have met anyone else, though, of course, he might have become engaged to a friend who visited him while on his sick bed.

Grace Dunbar must have been among these visitors, and I would like to think that she was the second Mrs. Watson. A few months before, in the problem of Thor Bridge, Holmes and Watson had visited her in prison when she was accused of killing the wife of the Gold King, Neil Gibson, whose secretary and governess she was. To quote Watson's own words: " I had expected to see a beautiful woman, but I can never forget the effect which Miss Dunbar produced on me. It was no wonder that even the masterful millionaire had found in her something more powerful than himself—something which could control and guide him. One felt, too, as one looked at that strong and yet sensitive face that even should she be capable of some impetuous deed, there was an innate nobility of character. She was a brunette, with a noble figure and commanding presence. but her dark eyes had in them the appealing, helpless expression of the hunted creature who feels the nets around it, but can see no way from the toils."

Certainly when he could write like this Watson was in the mood to fall in love, and the dark eyes recall the first remark of Mr. Darcy about Elizabeth Bennett and what it led to. Miss Dunbar must have been most grateful for her rescue from such a dreadful accusation, and most distressed to hear so soon after of Watson's wound. But I find it hard to think of Watson as a successful rival to the widowed Gold King, who would certainly have been popular with women.

And even had this difficulty been overcome it would not account for the end of the partnership with Holmes that was to follow so soon; for Miss Dunbar would have been a second Miss Morstan, only too anxious to encourage Watson in this collaboration, and we might have expected 1903 to be another period as prolific of adventure as 1889 after the first marriage. Recalling the dictum of Holmes that whatever is emotional is opposed to that true cold reason which is to be placed above all things, reason must conclude that Watson did not marry Miss Dunbar, however much emotion would like us to believe that he did.

We know little of the second Mrs. Watson, but, reading between the lines, she does not seem to have been such a charming character as Miss Morstan. After his first marriage, Watson was encouraged to take a share in Holmes's investigations and was frequently away from home for this purpose—indeed, it is surprising that his practice was as successful as it was; but after his second marriage there are very few more adventures recorded, so presumably his second wife was not as complacent. Perhaps we must blame her even for Holmes retiring soon after September, 1903. Watson was married in December, 1902, and perhaps, when a son and heir was born the following September, Mrs. Watson put her foot down and said that he must stick to his own work; we can well imagine what a blow this would have been to Holmes, and it probably decided him to go into the retirement about which he had often been thinking.

There is one other allusion which has made me take this rather unfavourable view of Mrs. Watson. In the Adventure of the Veiled Lodger, Holmes was in a smoke-laden atmosphere with an elderly lady of the buxom landlady type when Watson entered, and Holmes is reported to have said that Mrs. Merrilow did not object to tobacco, if Watson wished to indulge his filthy habits. It is impossible that Holmes should have made this remark or that Watson should have added it as editor, considering their own habits as regards smoking, and for this and other reasons it seems that " The Case Book of Sherlock Holmes " must have been edited by a third hand. Who more likely than Mr. Watson ?—and I fear she introduced this remark because she was trying to make her husband give up smoking as well as sharing Holmes's work.

Watson's third practice was in Queen Anne Street, and this raises the question of whether he was a consultant or one of the few general practitioners in this neighbourhood. His third attempt seems to have been at surgery, and at first sight it seems unlikely that he could have had sufficient experience for we only hear of him with a general practice in Paddington and, later, in Kensington. But he must have started with some surgical experience in Afghanistan, and must have extended it with accident cases from his railway clientele from Paddington (The Engineer's Thumb). Even after he had given up his second practice he sat in silence all evening, deep in recent treatise on Surgery (The Golden Pince-Nez). And, perhaps even more important, the South African War would have given him plenty of recent surgical experience, and would have encouraged him to embark as a surgical specialist.

It is good to read that this last venture flourished, for in 1903 Holmes remarked that Watson bore all the signs of the busy medical man with calls on his every hour (The Mazarin Store), so Surgery gained what admirers of Holmes lost.

Sport

ASSOCIATION FOOTBALL

Southern Amateur League

Guy's *v.* National Provincial Bank

At H.O.P. Result—Lost 2—4

17th February, 1951

On a pitch made treacherous by the heavy rains and which quickly churned up making good football out of the question, Guy's lost through an amazing series of defensive lapses.

The first half was extremely even with first one side and then the other attacking. The only score being made by the Bank when the home custodian dropped the ball at the foot of a visiting forward.

The second half saw Guy's on the attack and they quickly equalised when Prince beat two men and put the ball well out of the goalkeeper's reach. Guy's strove hard for the lead but rather against the run of the play the Bank scored, and then if the conditions weren't bad enough a hail storm drove the players to the welcome shelter of the pavilion. This, however, abated and the mudlark was continued.

A dangerous run by Leckie was narrowly thwarted when the goalkeeper brought off a fine save and then a further setback occurred when the Bank inside-right scored after a defender, bogged down in the mud, was unable to rectify his mistake.

However, Guy's crept up again when Matthews received a pass from the centre-forward and scored with a good drive. Guy's pressed hard for the equaliser but to no avail and then on the stroke of time the Bank made their tally four when they scored from the narrowest of angles.

Team : M. Lyon ; P. Southgate, J. Wylie ; P. Shea, D. Allan, A. Swift ; C. Leckie, D. Matthews, A. Fearn, A. Prince, D. Oldfield.

HOCKEY

Inter-Hospitals Cup, Semi-Final

Guy's *v.* St. George's

At H.O.P. Result—Won 2—0
13th February, 1951

In spite of the heavy pitch the game was fast and open. The ball swung from defence to defence, but there was little mid-field play. George's had more opportunities for scoring in the first half, their inside-right was unfortunate to miss the goal by a fraction of an inch when taking a pass a foot in front of Guy's goal-line. The fast pace continued well into the second half. Guy's were put one up when Opie collected a free hit inside the shooting area, his shot bounced off the keeper's pads but Opie managed to get to it and shovel it into the goal. This goal put fresh life into both sides. It seemed that the score would be levelled by a shot from George's inside-left, the ball, however, bounced from the goal-post and trickled in front of the goal to find touch. Earl scored Guy's second goal by taking a pass from Meyer who had taken the ball into the shooting area. During the game no one could have forecast the result, perhaps a draw would have been a fair result, but as one of George's supporters remarked, " Guy's took their chances."

Inter-Hospitals Junior Cup, Semi-Final

Guy's *v.* St. Thomas's

Away. Result—Won 3—2
7th February, 1951

Determination and keenness made up for a lack of finesse. Guy's forwards tried hard to get the ball moving but St. Thomas's defence were solid and Guy's passing was not accurate. Goals were scored alternately, St. Thomas's opened the scoring. A shot by the inside-right from an acute angle gave Guy's the winning goal. Guy's defence must clear harder and sooner, and the forwards must swing the ball about if they want to win the junior cup. Cautley at left-wing set a fine example to his team. Nicholson in goal and Kingston and Eggington as halves played well to gain this well-deserved victory.

Hospital Information, etc.

PASS LIST

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
November, 1950

Surgery
R. D. Hernaman-Johnson *D. J. Muller

Pathology, Bacteriology and Forensic Medicine
K. B. Bender H. G. Hexter
R. D. Hernaman-Johnson W. H. McKendrick
*D. J. Muller

Medicine
W. H. McKendrick

Midwifery
W. H. McKendrick

Final Examination
December, 1950

Pathology, Bacteriology and Forensic Medicine
G. Dixon M. M. Levene
A. Ross

Medicine
*F. J. Covill G. Dixon

Midwifery
H. C. Cunningham G. Dixon

*Has completed the examination

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
January, 1951

Surgery
E. J. Elkington J. E. K. Moore
W. G. Rhys-Jones

Pathology, Bacteriology and Forensic Medicine
E. J. Elkington W. G. Rhys-Jones

Medicine
J. E. K. Moore W. G. Rhys-Jones
A. Ross

Midwifery
V. R. Jones B. S. Vergano

ROYAL COLLEGE OF SURGEONS OF ENGLAND

F.D.S.
January, 1951

R. D. Emslie P. J. Hill W. J. Tulley

UNIVERSITY OF LONDON

Faculty of Science
Ph.D.

January, 1951
P. R. Rowland

AWARD

The Senate of the University of London, at a recent meeting, approved the following recommendation :—

That the William Mickle Fellowship for 1950–51 be awarded to R. C. Brock, M.B., M.S. (Guy's Hospital), in respect of the work he has carried out during the past five years.

"The William Mickle Fellowship, value £250, is awarded to the person, a graduate of the University, who has done most to advance medical art or science within the preceding five years, and has therein shown conspicuous merit."

UNIVERSITY OF LONDON

The Governing Body of the British Post-graduate Medical Federation has awarded the following travelling fellowship for 1951–2 tenable for one year :—

J. O. Laws, M.R.C.P. (Cytology, France).

CHANGES OF ADDRESS

D. Paget Davis, M.R.C.S., L.R.C.P., 112 London Road, Chelmsford, Essex. Tel. : 3209.

I. O. Ends, L.D.S., R.C.S., 24 Tonbridge Road, Maidstone, Kent. Tel. : Maidstone 3128.

A. M. Huntley, M.R.C.S., L.R.C.P., 87 Shelley Crescent, Heston, Middx. Tel. : HOU 9484.

W. M. Mollison, C.B.E., M.Ch., F.R.C.S., (Tempy) Innisfree, Polzeath, N. Cornwall.

W. G. Selley, L.D.S., R.C.S., "Sunnymead," 73 Southbrook Road, Countess Wear, Exeter, Devon. Tel. : 55187.

D. J. R. Snow, M.R.C.S., L.R.C.P., 4 Zamia Street, Claremont, W. Australia.

P. Maxwell Stephens, L.D.S., R.C.S., 17 Upper Wimpole Street, London, W.1. Tel. : Welbeck 6091.

PAPERS BY GUY'S MEN

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BIRTHS

MASTERS.—On February 14th, 1951, to Maria (née Hepper), wife of P. L. Masters, M.B., B.S.—a sister for Anne.

YELLAND.—On January 24th, 1951, at Bridgnorth Infirmary, to Barbara (née Hudson), wife of Stuart J. Yelland, A.R.I.C.S.—a daughter.

MARRIAGES

EKSTEEN—APPLETON.—On February 24th, 1951, at St. Jude's Church, Southsea, A. C. de B. Eksteen, M.R.C.S., L.R.C.P., to Veronica Appleton, S.R.N.

HOLE—CALLAGHAN.—On January 31st, 1951, at St Mary's Parish Church, Hucknall, Notts., Clive H. Hole, L.D.S., R.C.S., to Iris Callaghan.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

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PASSIM

> " Costly thy habit as thy purse can buy,
> But not expressed in fancy ; rich not gaudy :
> For the apparel oft proclaims the man."

THE dress and costume of the human race not only reflect startling racial differences but, in any one country, have evolved through a whole series of styles. There has, in fact, been a continuous change, from primitive utilitarian to contemporary " utility," with some of the wildest excursions and flamboyant excesses on the way. Today, the form of our adopted apparel is very largely the outcome of a prevailing style. A lady, a cynic is said once to have observed, must be so dressed that she proclaims herself, while a man, by contrast, must be so attired that he is never conspicuous. Within the reigning standards—never ordained but none-the-less binding—individuals may yet betray, or even consciously display, their own particular characters and feelings. Not even a uniform can subdue this entirely.

The cap, dress and apron of the Guy's nurse is very much an inheritance. It is symbolic, becoming and, we are led to believe, equally comfortable and convenient. Fortunately it can boast other features besides mere functional considerations. The dress is no mere " overall," but contributes its own measure of feminine charm. And if the cap in so many instances fails either to protect or cover the head, at any rate it leaves adequate scope for the exhibition of a whole range of appropriate and fascinating hair styles.

A similar expressiveness is apparent in the attire of various other members of the so-called " female staff." Where the lack of distinctive character is most plainly evident, however, is in those forms of dress that are of more recent introduction. White coats, admittedly, serve their purpose and, presumably, radiographers, physiotherapists and technicians find them reasonably satisfactory. Yet, despite the innovation of coloured belts and epaulettes, they leave little opportunity for individual variation and certainly tend to extinguish, or at any rate inhibit, the pleasant feminine sweetness which might otherwise obtrude.

To design an attractive uniform calls for far more skill and creative art than any party frock or evening gown. In one instance there is virtually no limit to the resources, either in materials (or lack of them) or in invention. In the other, more mundane considerations of durability and finance must largely—but never, we hope, entirely—prevail.

Our attention has lately been drawn to one department in which, possibly, we are seeing the best of a bad job rather than the results of a good one ; namely, the new uniform of the Hospital porters. Just now they have appeared in the latest issue of their regulation garb. In their new array they look, as one uncharitable critic was heard to declare, " like hybrids between uncomfortable A.R.P. workers and disinterested postmen." The porters of the Hospital play a very prominent part in the running of the place—and the term " prominent " is used advisedly. But, we submit, their appearance is in no way neat, attractive or even friendly, not by any means because of their manner but rather because of the undistinguished red-and-blue in which they are clothed. Like so many who carp, we fully realise that we are thus proclaiming ourselves too late. Next time, though, may we ask that those responsible for the porters' " habit " shall see that there is used just a little more initiative in the design, just a little more art in the style and just a little more cut in the execution thereof ?

The New Guy's

By ALNER W. HALL, M.C., F.R.I.B.A.
Architect to the Hospital.

THIS article should be considered as an extension to the one so ably written by Mr. Lees Read which appeared in the *Gazette* of January 27th, 1951.

In Mr. Read's article he outlined the many events which, since 1936, took place before the final and accepted Block plan was evolved. This plan is the fourth that has been prepared and is really a somewhat contracted form of the third scheme, which became known first as the Star plan, and is sometimes referred to as the " Snowflake " design. The Block Plan is illustration No. 7 on page 29 of the January *Gazette.*

Guy's men, and women, the world over may like to know how this plan was first conceived and something about what it will contain, how it will be built and perhaps a little about what it will look like, both inside and outside.

Originally a mass of reports and recommendations outlining the requirements was prepared based on the assumption that there would be not less than 1,000 beds, the number recommended for a Teaching Hospital in the Goodenough Report. An analysis of all this information took some considerable time but even in the very early days it was clear that the scheme would have to be conceived on the grand scale. While these reports and recommendations were being studied, much thought was given to the site, a large open partly blitzed area of some 11 acres immediately to the east of the present Hospital site. At the beginning no restrictions were imposed, but at a later stage, the Ministry of Health laid it down that the total bed capacity was to be limited to 800 beds, and later still the Board indicated that the new buildings must be contained on that part of the site east of Great Maze Pond, thus leaving untouched both Guy's House and Hunt's House.

Under the Town and Country Planning laws, there are three main points which have to be considered :—

(1) Angle of light, i.e., the angle between any section of a building at ground level and any other section, either of the same building or any buildings on opposite sides of the public streets. This angle is generally taken as 56 degrees.

(2) Site cover, that is the relationship between the site as a whole and the area of site to be covered by buildings, which is limited by the angle of light obtainable between blocks and can be taken as approximately $33\frac{1}{3}\%$ of the whole site.

(3) The Height, which is generally taken as 80 ft. 0 in. to the parapet, plus some additional height by setting back to keep inside the 56 degrees angle, up to a maximum of 100 feet unless concessions are allowed by the L.C.C.

A combination of all these three major points makes for difficulties in planning and construction, and the solving of the problem calls for a nice adjustment of the three in order that the maximum amount of floor space can be provided without infringing the Building Laws.

The shape of the accepted Block Plan arose from a chance remark made to the Architect by Lord Cunliffe, who, when discussing the many problems involved, said, " Why not plan round a Central Tower ? " From this idea, therefore, the plan started to grow. Actually there will be four towers ; one main Central Tower and three subsidiary towers, all four being connected by three great blocks of buildings as " Spokes " from the Hub or Central Tower. From each of the three subsidiary towers three wings project, all at right angles to each other, and their own " Spoke." These wings will contain all the main wards. The " Spokes " will contain the research and teaching units, theatres and administrative and other units.

The size and general composition of the Ward Unit was laid down in the original memoranda, and a Sister's Unit was to be one of 25 beds, divided to give a general ward of 20 beds and 5 single bed wards. To satisfy the shape of the plan as a whole, and to arrange the wings of the required length to fit the shape of the site, all the ward wings (except the one on the extreme eastern boundary which has to be curtailed), are given a splayed outline. By planning on these lines the 20-bed wards can be divided into two 10-bed wards, with a central space for Sister and supervision. A typical ward shape is given as illustration No. 8 in the January *Gazette*. There will, therefore, be 8 ward units all of the same size and shape, the ninth unit being the exception previously referred to. Not all the units will be used for beds, for some will be available for other departments.

At every stage of the development of the plan, the problem of movement for medical and research staff, students, visitors, nurses and administrative staff has been under the closest scrutiny. The basic idea is that all medical and research staff, students and many of the administrative staff will use the lifts and staircase in the central tower. All patients, nurses, visitors and services to wards will use the lifts and staircases in the subsidiary towers directly serving the ward units, thus avoiding so far as possible, all cross traffic about the building. Practically all the movement will be vertical, by some 20 or more lifts and the plan of the building reduces the horizontal movement to the minimum. This concentration is in marked contrast to many of the modern Continental hospitals, which in spite of the heights to which they have been built, still have very long horizontal corridors, in some cases at least 1,000 feet long. In section the new Guy's will satisfy all the conditions laid down covering angles of light and site cover, but the planning of the alternative means of escape which have been accepted by the London County Council in principle has enabled a greatly increased height for the three main " Spokes " beyond that normally allowed under the Building Acts.

Always there is a problem to solve when planning a multiple ward block scheme and that is one of aspect. Usually the ward aspect is as nearly east and west as possible, with a southern aspect in addition if it can be arranged. While this east-west aspect is the ideal, it is not of such great importance today as to justify spoiling an otherwise good layout. It is more important to plan so that every ward gets its full ration of sun sometime during the day.

Again there is the question of cross ventilation to the wards, considered so essential in this country. The layout of the wards enables this condition to be completely satisfied, as will be seen in the plan illustrated.

Here attention should be drawn to the problem which is always under discussion when a new hospital is being designed. Are the wards to be large or small; large wards being those with 10 or more beds, small wards those with 4 or fewer beds? On the Continent, in Sweden, Switzerland and France and in America the small wards are now in much favour, but apart from many other considerations, the adoption of this type eliminates completely the possibility of planning for cross ventilation, except by introducing a costly system of mechanical input and extract of fresh air. This is the system adopted in the two great hospitals in Stockholm. This method of mechanical ventilation for wards is not popular in this country, where the opening of windows is still the accepted method of obtaining fresh air. This, of course, does not apply to certain departments in the ward unit, and in the New Guy's, all sanitary offices, ward kitchens, sterilizing or treatment rooms and rooms of a like nature will have mechanical ventilation in addition to the normal method of opening windows.

The wards are planned so that each bed can be curtained thus forming a cubicle and each cubicle will have 2 windows. The curtains, when drawn back, will leave the whole ward clear.

The final detailed layout of the ward adjuncts has not yet been determined and will require much careful thought and planning. One point which has been considered is that of flexibility, and to get this it is possible that except for such units as sanitary offices, ward kitchens, etc., which call for permanent walls and fittings, all other partitions would be made of such materials which could be moved, altered and adapted to different positions as required.

The actual disposition of the various ward units has still to be settled, but generally speaking it is assumed that the main Surgical Wards will be planned on a horizontal plane and in close touch with the theatre floors, whereas possibly the Medical and Specialist Ward Units will be planned vertically, i.e., immediately over each other.

The general planning provides for a floor layout of :—

(1) Sub-basement.
(2) Basement.
(3) Ground Floor.
(4) 6 floors of wards.
(5) 1 floor, the 7th over ward blocks, for research.
(6) 3 floors, the 8th, 9th and 10th for Theatres, etc.
(7) A further floor, the 11th for tanks and engineering services.

There will be no beds above the 6th floor, the remaining units being contained (except for the 7th) in the great " Spokes " connecting the Central and Subsidiary Towers. Architecturally this will enable the building to rise up in varying heights to be dominated by the Central Tower as the focal point of the massed composition.

There is still a great deal of detail work to be done in the general internal planning, for example, the theatre floors, which, unless the original instructions are varied, will contain some 10/12 theatres, divided between general surgery and the specialists. There will be special sections allocated to dental work and research, and much space will be required to accommodate the research sections required by the Medical School. Two or more large lecture rooms, each to hold some 200 people, with the necessary adjuncts, will be included in the general layout.

The Radiotherapy and Radiodiagnostic Departments will require most careful thought not only in their positioning in relation to the in-patients but also with regard to the out-patients and casualty departments. Both departments will be comprehensive in their detail and a large area of spare space will be reserved for possible future developments.

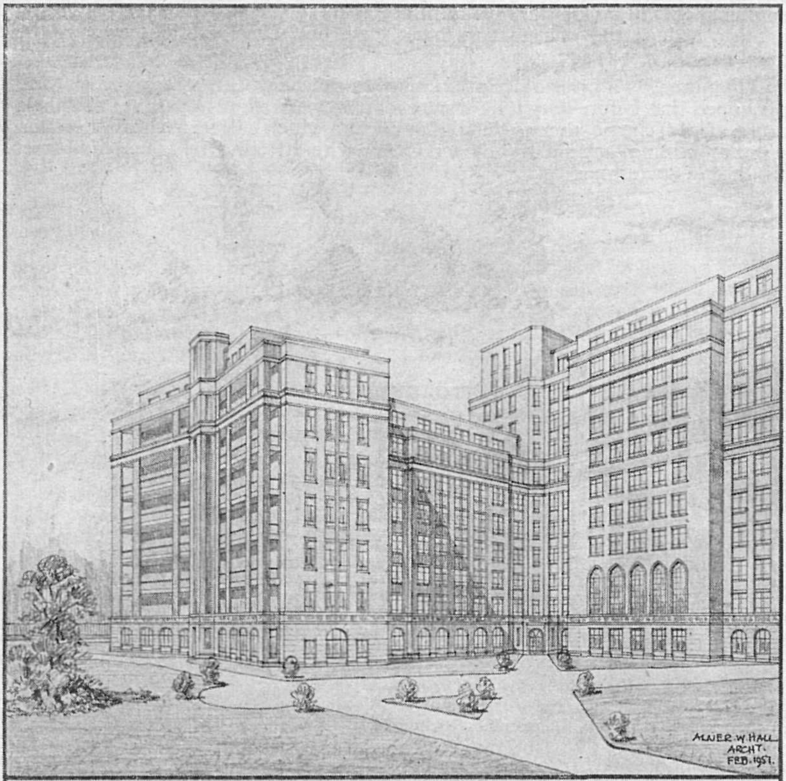
This latter point refers also to all specialists' departments as by no other means can provision be made for the inevitable changes which over the years are bound to take place. It would be folly to ignore this point of providing spare space for expansion, and merely, as it has been suggested, plan for " present needs only." It is proposed to incorporate in the main group of buildings the whole of the Dental School, but this may be a long-term policy. At the same time some thought must be given to the problem of finding the necessary accommodation and the right place to house the School.

On the ground floor and in close touch with the wards will be planned the Out-Patients and Casualty Departments, each with their own entrances straight from the street. At the moment no detailed plans have been worked out for these departments.

A large area of the ground floor will be allocated to staff, visitors' and patients' entrances, with the porters' lodge as the place of control. Areas will no doubt be required for records, canteens, cloakrooms, medical staff and other administrative staff accommodation. The basement will, if possible, be kept clear of all work dealing with the treatment of patients and will be kept for the main kitchen and stores of which there will be many. There will be direct access to the basement from one or more of the streets surrounding the site, by means of traffic ramps, both in and out.

At some level yet to be determined there will be an underground car park, and there will be sub-ways connecting all parts of the Hospital, on both sides of Great Maze Pond. The Sub-Basement which will extend under the whole of the buildings will enable all the engineering services to be run wherever they are required. It may be that part of this Sub-Basement will have to be specially designed, constructed and equipped to act as an emergency hospital in case there is yet another war.

The engineering and constructional problems involved in the design will be very complicated and will require much thought to be sure that everything is provided, with a substantial margin for possible future developments. The site, although level, largely consists of made-up ground, and water will be found at about 17 ft. 0 in. below ground level. As it is proposed to build well below this, constructional problems will be complicated and costly, but under today's conditions, nearly everything that can be known about London's sub-soil is known and so no insuperable difficulty is to be anticipated. The general construction may be either steel-framed or reinforced concrete, in either case the floors and walls will be of fire resisting materials. The actual materials to be used will depend to a large extent on what is available at the time of building.



GUY'S HOSPITAL. A SKETCH SHOWING A WARD BLOCK & BALCONIES.

The engineering services will have to be comprehensive and will cover heating, steam and hot water, hot water services, electrical work for both power and light, gas and oxygen, all to be supplied in large quantities. The mechanical ventilation system will also be on a large scale. In addition, there will be telephones, wireless, signalling systems and all the thousand and one other engineering services too numerous to mention in this article.

As a home for all this section of the rebuilding it is proposed to develop a large site, two thirds of which belongs to the Hospital, and build a large Central Boiler House, Works Department and Laundry. None of these will be required in the early stages of development as the existing departments with the additional boiler house recently completed and in use, will enable the necessary services to be run for the first section to be built.

It is difficult to say much about the architectural external treatment, as no serious attempt has yet been made to design in detail, although sketches have been made as a general guide to the massing of the whole group of buildings.

A small pencil sketch is shown giving an indication of one ward block with its open air balconies and a portion of the connecting " Spoke " and the corresponding subsidiary tower. This sketch gives a general indication of the scale of the buildings.

It is certain that whatever treatment is finally accepted it will have to be very simple in its detail, with little ornament and designed with the main object of reducing maintenance costs to the minimum.

As for the interior finishes, the basic idea will be to get a general appearance of lightness, airiness and cleanliness, and by the careful choice of colour, a feeling of cheerfulness in every department. Here again, the problem of maintenance will be kept always in mind, as in such a vast building, anything that can reduce the upkeep cost must have first consideration, even if the initial capital cost is somewhat higher.

This, then, is a brief description of what the New Guy's may be like, and it is hoped that before very long a start may be made, first to prepare the plans for the whole scheme, then to detail that portion which will form the first section of the rebuilding, and finally, by agreement with all concerned, an actual start of building operations.

Guy's Diary

ACADEMIC

March		
		Exhibition. Surgical Department. " Rectal Bleeding."
29th	1.00.	Dr. Craft. Clinical Lecture. " Surgery of Amputations." (With coloured films.)
	4.30.	X-Ray Meeting. Gordon Museum.
30th	1.00.	Sir John Conybeare. Clinical Lecture. " Ulcerative Colitis."
April		
		Exhibition. Surgical Department. " Fractures."
2nd	5.00.	*Surgical Department. Film of Operation for Repair of Inguinal Hernia* by " Tanner's Slide " method. Clinical Theatre.
3rd	1.00.	Dr. Helliwell. Clinical Lecture. " Intravenous Anæsthesia."
5th	1.00.	Mr. Lawrie. Clinical Lecture. " Some Recent Cases."
	4.30.	X-Ray Meeting. Gordon Museum.
6th	1.00.	Dr. MacLean. Clinical Lecture. " Antibiotics."
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
9th	1.00.	Mr. Atkins. Clinical Lecture. " Broken Ribs and Other Common Injuries."

SPORT

April	
7th	Rugby 1st XV *v.* Richmond. (Richmond.)

?D

HONOUR

From Mr. E. J. Gaffney we learn that an old Guy's man, Brig. F. S. Annesley, has recently become Viscount Valentia, succeeding to the title on the death of a distant cousin. This is an Irish peerage, dating from the time of Queen Elizabeth and Brig. Annesley is certainly a most worthy character to ascend to such an honour.

ART

The Art Exhibition which, as mentioned in the last issue of the *Gazette*, is to be held in the Gordon Museum next June, will comprise paintings and drawings from staff, students and employees at the Hospital. For the previous exhibition, in 1949, there was considerable support and exhibits this year will accordingly be limited to three from each artist.

The time and place for sending in will be announced later, but works will be required before the end of May. Meanwhile, any enquiries should be addressed to Miss Mary Waldron, Department of Medical Illustration, Telephone: Hop 3500 (Extension 395).

" Baltimore and Boston"—a Diary

By SIR HENEAGE OGILVIE, K.B.E., M.Ch.

(*Continued*)

Friday, September 29th.

Surgical clinical conference at Ann Arbor.

Kahn, Peet's successor in neuro-surgery, discussed the surgical treatment of intractable pain. He had three main topics. First the intolerable headaches of hypertension that are relieved almost invariably by operation. Second, the importance of exact topography in chordotomy ; unless the section goes right back to the dentate line, pain is not relieved in the saddle area. Third, the treatment of pancreatic calculi and chronic fibrous or calcifying pancreatitis, in which severe pain is such a prominent feature, by splanchnicectomy (usually bilateral, but sometimes the right is enough). Referred to articles by Bronson Ray in Archives of Surgery, 1948 and 1949.

Badgeley, the orthopædic surgeon, gave a magnificent presentation of a series of fractures and fracture-dislocations of the cervical spine ; in most of them the displacement had recurred after reduction and fixation, and they had been treated by re-reduction and fusion of the spinous processes.

One case shown had had an old fracture dislocation of the atlanto-occipital joint, missed in the first X-Ray. The accident was due to driving too fast over a bump and hitting the roof of his car. Badgeley said that these fractures had become much more common since metal roofs had replaced fabric (of course at the same time speed has doubled). This man was treated by cervico-occipital bone fusion.

Another case shown was a man who had had four vertebræ fused after a car accident. He had since had another bad accident in which he was thrown 45 feet, and broke several bones, but not his graft. He had remarkable neck movement in spite of the fusion of four vertebræ.

Badgeley's general thesis is that when the fracture is through a vertebral body, good repair can be expected after reduction and fixation ; when it is through a disc, or across the base of the odontoid process, union is by fibrous tissue and will yield, so that bone fusion is needed.

Finally, J. Alexander, who is now in robust health, discussed a series of cases of cancer of the lung. His general thesis was that symptoms are equivocal, X-Rays uncertain, and bronchoscopy helpful in only about 50 per cent. of lesions in their early and curable stage. Trial of X-Ray therapy as a diagnostic procedure often postpones decision till too late. Operation, usually pneumonectomy, should therefore be done if the provisional diagnosis has been made by an experienced clinician.

After lunch with Coller at the Country Club, we did an unofficial round with a group of residents. The wards presented a succession of fascinating clinical problems. I was once more a little disturbed to find how, even in this splendid centre, surgical judgment tends to be warped by non-surgical factors : the question to be settled is not " does the patient need this treatment ? " but " can he afford it ? " not, " what is the best interval before the next stage," but " how long can he afford to remain ? "

I took the 6.30 plane back. We started on time, but ran into a " pile up " over Washington, and had to stay in the air for more than an hour before we got leave to land. The same thing happened to the transfer plane to Baltimore, which was " waiting permission to land," but did not get down till after 11.00. Everything is done to mitigate the trouble, and the ticket can be used on any air line doing the flight.

Saturday, September 30th.

I did a hernia, a large oblique inguinal in a negro who had worn a truss for years. Identification of planes was a little difficult, but the assistance was wonderful. I did a thread lattice repair.

Sunday, October 1st.

A long ward round going on till nearly 2.00 p.m. We started in the X-Ray Department, where we saw the Ba meal films of the man with the cæcal defect. They showed a remarkable distribution of barium over the whole length of the small intestine at two hours, suggesting some adhesions : but as the greater part was in the colon by 5 hours, we felt this could not be stressed as a diagnostic point, and that laparotomy was advisable.

There were also the X-Rays of a young boy who had had a gastrojejunostomy and was now bleeding. The interesting point was that, following a crush injury to his thorax, he had developed a right empyema and a traumatic aneurysm of his aortic arch. This aneurysm had been treated by wiring and electro-coagulation, apparently with excellent results.

Afternoon. Party at Kieffer's to meet the surgical interns and residents.

Monday, October 2nd.

Started the day with Bing in the cardiac investigation department and, after having the whole procedure explained, watched the investigation of a little boy of 10, who might have been a pulmonary stenosis or a tetralogy of Fallot. Investigation involved breathing into a bag for a couple of minutes for oxygen consumption estimations, the strapping of E.C.G. leads to his wrists and one ankle, injection of local anæsthesia into his arm, incision, passage of the catheter into the heart and manipulation through various chambers. The most wonderful thing was the complete control of the boy by a young woman who chatted away for an hour and a half, questioning, flattering, teasing, encouraging, explaining what it was about, warning him when it was going to hurt, and maintaining him in a state of cheerful acquiescence through the long and rather arduous investigation. We donned red eye shades some time before to assume dark-adaptation, so we could watch the complicated course of the catheter through the heart chambers. Pressure was taken in superior vena cava, right auricle, right ventricle, pulmonary conus, pulmonary artery and right pulmonary artery, and blood samples from each to estimate volume flow. The man at the electrocardiograph was taking continuous tracings, and reporting upsets from time to time. Procaine amide was injected at one time to prevent conduction disturbance. The pressure waves were shown on a screen as well as recorded, so it was easy to see the sudden drop between right ventricle pressure and pulmonary artery pressure, indicating a stenosis at the valve.

I went to see a disc operation—done as a combined job by neuro-surgeon and orthopædic surgeon. The first removes the protruding disc, the second then fuses the spine. At 1.30 I did a gastrectomy for bleeding gastro-jejunostomy (there was only a shallow ulcer). As the duodenum was long and unscarred I did a Billroth I.

At 7.30 Bahnson did a ward round with the newly-returned students.

Tuesday, October 3rd.

8.30. I did a laparotomy on the man with the cæcal defect. It turned out to be a solitary diverıculum half-an-inch medial to the ileo-cæcal sphincter, in which a large fæcolith was impacted. After dislodging the fæcolith I invaginated the diverticulum and removed the appendix.

Later I watched Henry Bahnson explore the chest on the diagnosis of "spring-water cyst of the pericardium." It was. The patient was a man of over 30, who remembered a blow of intense ferocity over the heart while boxing about ten years ago, a blow that completely laid him out. Lately he had had attacks of laboured respiration for which an X-Ray was done at another hospital. He was told he had an intra-thoracic tumour which was inoperable. He was shown by Bahnson at rounds last night. X-Ray showed a rounded swelling, projecting to the left and forwards from the pericardium, moving on respiration with the pericardium rather than the diaphragm or the lung. On the signs and absence of symptoms Bahnson diagnosed a spring water cyst, a congenital cyst of the pericardial anlage containing clear fluid. He gave as differential diagnosis an aneurysm of the heart wall, following the blow on the precordium. Nanson (a New Zealander) suggested that a hydatid should always be borne in mind when a single rounded swelling was found anywhere.

Operation. (Left 5th interspace approach) showed a beautiful translucent cyst attached to the pericardium by areolar tissue. After a photograph had been taken, it was shelled off without opening the cyst or the pericardium.

Meanwhile Kieffer did a first stage thoracoplasty and a thyrotoxic goitre very nicely and bloodlessly.

Evening. I gave a talk on peptic ulcer with slides in the Hurd Hall. We had a free discussion that went on for over an hour. We had dinner with Thomas Johns and his wife and parents (father, surgeon at Richmond, Va.).

Wednesday, October 4th.

I spent the morning in the theatre. There were two heart cases, done by Scott, the first a pulmonary stenosis, the second (the little boy I had seen undergoing cardiac catheterisation) a tetralogy, treated by anastomosis of left subclavian to left pulmonary.

Bahnson was doing a recto-sigmoid growth. He found glands along the inferior mesenteric artery, and tied it at its origin from the aorta. He then mobilised the whole left colon, and anastomosed transverse colon to rectum, using interrupted silk for the outer layer, continuous catgut for the inner.

I watched Bill Rienhoff doing a gastrectomy for duodenal ulcer, a nasty adherent one. He started by identifying the common bile duct and ligating the gastro-duodenal artery which was in dense adhesions. Then he opened the duodenum and worked round the ulcer, leaving it on the pancreas, and sewing the stump transversely with interrupted silk sutures. He finished by a very high gastrectomy, anterior anastomosis. Later on the ground floor the head nurse of the Halstead block introduced me to a patient who was an expert œsophageal talker. He had had his larynx removed a year ago, and learned to talk in January. His speech was wonderful, a little monotonous, but practically continuous with not at all obvious gulps. At most one would have said that he had a sore throat and was short of breath.

At 7.30 p.m. I attended a pathological conference, a most useful unofficial show conducted by the Residents and Junior Residents, with an Assistant Pathologist at hand for advice or attack. All the pathological reports and sections of the week's work, about 50 cases in all, were at hand, and about 20 of them were discussed, their histories given and the slides thrown on the screen.

Afterwards I went round the wards with Keiffer. The night staff seem not a bit disturbed by the invasion of a class, or being asked for a trolley to take out stitches. One tricky case was an old coloured woman who had just had an amputation through the thigh for diabetic gangrene. They had packed the leg in ice for a few days, not for anæsthesia, but to cut it out functionally from the circulation. The effect was to stop pain and allow her to sleep for the first time, to stop the absorption of toxins and bring her temperature dramatically down to normal, and to enable her acidosis to be controlled. Then they amputated under a light general anæsthetic.

Thursday, October 5th.

At 9.00 I went to a teaching class by Harvey Stone. Four cases were brought into a teaching room, introduced by the student and discussed by Stone. An admirable discussion.

In the theatres I watched Bahnson do a hernia under local anæsthesia and Stafford doing a gastrectomy for a difficult duodenal ulcer. Both he and Rienhoff make a point of exposing the common duct before tackling the duodenum : they may be right. High Polya anastomosis (anterior).

In the afternoon I visited the 3rd year operative surgery in the Dog House (Hunterian Laboratory). The students were on their first day's operating, making and closing an incision in the back. They worked in groups of 4, one doing surgeon, one assistant, one scrub nurse and one anæsthetist. Stafford was in charge. Full aseptic ritual was observed, and everything was done very carefully. Two officials of the city Board of Health were making an inspection at the time.

At 4.30 there was a surgical conference presided over by Scott. Two remarkable cases were shown.

A woman of 67. Three years ago dramatic attack of upper abdominal pain lasting a few hours: two years ago similar attack lasting longer and going through to right scapula: a year ago a third similar attack. Between these attacks she was well except for some indigestion and flatulence. Three months ago another attack, but this time it went on, with remissions. She became jaundiced, her urine dark, her stools dark. She had intermittent fever. She lost weight. She vomited blood on one occasion.

Investigation showed icterus, an obstructive van den Berg, and considerable liver damage. It also showed considerable anæmia—hæmoglobin 9 grammes. A cholecystogram showed all the shadocol unabsorbed and held up in a pyloric pouch.

Her history was that of gall stones going on to common duct obstruction. The blood loss and anæmia seemed too profound to be explained by Vitamin K deficiency, and raised the question of carcinoma of the ampulla, which often bleeds considerably. The few I have seen were painless, but Scott quoted Brunschwig as saying that they may have a lot of pain, and a surgeon from the Veterans' Hospital who was present confirmed this on two recent cases. A further point was the pyloric hold up: did this possibly indicate a chronic duodenal ulcer obstructing the common duct, or a pyloric carcinoma with glands along the gastro-duodenal artery? The early history was unlike ulcer or cancer. To be shown next week after a Barium meal.

The second case was a negro who had been admitted in 1947 for a bullet wound in the left thigh, the bullet being removed: again in May, 1950, for appendicitis. Later he came in with a swelling in the left groin, giving some pulsation, thought to be transmitted. The swelling was thought to be lymphogranuloma inguinale, but the Frei test was negative. A biopsy showed granulation tissue. At a second biopsy a needle was stuck in and drew blood. Dr. Blalock was sent for, stuck the needle in again, and saw the plunger shoot up, so he said, "Get into the abdomen quick, and tie the external iliac." Kieffer started the incision, the patient strained, and suddenly blood shot across the room. He tied the artery and later the aneurysm was shelled out with the finger by someone doing a dressing. A week after this operation the right femoral pulse stopped.

An arteriogram was shown, the needle entering the aorta from behind on the first lumbar vertebra, and pointed upwards, so as to fill the renal arteries. This showed all branches of the aorta, the left external iliac tied and the right dwindling to a fine thread, a full collateral circulation in the buttocks and round the hip joint, and the femoral filling again. What was the cause of the left aneurysm? The bullet went nowhere near the pelvis. What was the cause of the right femoral block? Spasm?

Another night round to pick cases for tomorrow's demonstration, which I am due to give at 8.30. I got two excellent ones.

First a woman of round 50, with G.P.I. and a gorgeous unrepressed verbosity. Eighteen months ago she was in a car smash, and the upper and outer quadrant of the left breast was cut across by glass, It was stitched in Washington, but had never really healed. Now she has this transverse cut 3 inches long, a hard deep ulcer with a stinking discharge, the nipple drawn upwards and outwards towards the fissure, the whole adherent to pectorals: but the breast and tissue feel soft up to the edge of the fissure, no real lump can be felt, and there are no palpable glands. An interesting differential diagnosis between (*a*) a scirrhous carcinoma cut into by the glass, (*b*) a cut with gummatous ulceration, (*c*) foreign body—glass or swab, (*d*) artefact: it is quite clear that the woman is mad to fight a law case over the smash and make the other side pay through the nose, and is quite capable of keeping the wound open.

Second, an old man of 70, with Paget's disease, a dicky heart (? due to the Paget's). a three years' history of ulcer going on to pyloric stenosis, and a barium meal showing barium occupying the centre of a huge stomach, almost as if there was a hair ball.

Friday, October 6th.

At 8.30 I gave my lecture on hernia, and then went on to the breast clinic (Dr. Lewison). They are chiefly concerned with the endocrine treatment of advanced cancers. At present a nation-wide investigation on the effect of endocrine treatment is being conducted by the Therapeutic Trials Committee of the Council on Pharmacy and Chemistry of the A.M.A. A very detailed report is first sent in, including every kind of relevant history, all blood chemistry tests, and charts of primaries, gland secondaries, and bone secondaries. This is followed by a detailed progress report sent in every three months, all reports arranged for mechanical analysis.

They have a ten-year follow-up (1940 to 1950) of patients with discharge from the nipple; of these 20 per cent. have eventually developed cancer. They advise a wedge mastectomy, with removal of the rest of the breast if microscopy reveals multiple changes.

In the theatres Trimble called me to see a man with arterial disease, worse in the right leg. He was down for a lumbar sympathectomy, but Trimble always gives a spinal first as a precaution. This case showed the wisdom of this, for the right leg instead of warming had got worse, was white and cold and looked cadaveric.

I gave a clinic at 12.00 and then after lunch operated on the woman with the breast. We excised the whole area for frozen section, but the naked appearances showed clearly enough that it was a scirrhous carcinoma. We therefore went on to a radical.

Dinner in the evening with Dick and Mrs. Kieffer, at Haussners, a wonderful combination of an epicure's restaurant with a mid-Victorian junk-shop of sugary art.

Saturday, October 7th.

I attended Medical Staff rounds in the Hurd Hall at 9.30. A very large gathering, and all the big guns were there.

First case a man of 54 with an eighteen months' history of pain three hours after food, relieved by food and alkalis. Several attacks of hæmatemesis and melæna. Admitted in a severe attack, in which he was transfused 7 pints. Recent Barium meal shows no deformity or ulcer in duodenum, but the whole 2nd part fills in all films, suggesting some obstruction near superior mesenteric vessels. General Discussion on the treatment of hæmatemesis. About this case, general opinion was that in spite of the X-Rays, which at any rate seemed to exclude œsophageal varices and gastric ulcer, the diagnosis of duodenal ulcer seemed almost certain on the history. Suggest re-X-Ray after another fortnight. Second case a negro of 40, known to have had a mediastinal mass since 1943. No symptoms, but turned down for military service. He had, till lately, refused any operation. X-Ray early this year showed no change since 1940. Two months ago started a cough and difficulty in swallowing. X-Ray showed mass in anterior and left part of superior mediastinum, a little more bulgy and knobbly than before. The trachea was pushed to the right, the œsophagus to the right and back. There was paralysis of the left vocal cord.

Blalock had expressed the opinion that the paralysis of the phrenic and recurrent laryngeal nerves suggested a malignant tumour: the anterior position and the long symptomless history suggested thymus or teratoma. At operation the tumour was found to be malignant, with secondaries in the pleura. The pathologists differed over the section; two favoured malignant thymoma, one epithelioma.

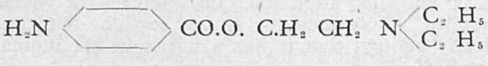
Third case was a white man of 54, stabbed in the left chest some weeks before with a butcher's knife. He cleared up after aspiration of blood from the left pleura and was discharged. He was re-admitted two or three times with hæmo-pericardium and bilateral hæmothorax, all probably slightly infected, and had had numerous aspirations and chemotherapy. He was now nearly well, clinically and radiologically.

Some discussion arose about the right hæmothorax. Most people thought it had followed injury of the right pleura when the pericardium was being needled. Blalock said that two types of heart wounds were met in hospital: major injuries of the chambers were immediately fatal. (1) Bleeding into the pericardium, giving cardiac tamponnade, (2) bleeding into the pleural cavity through a wide opening in the pericardium. He and Ravitch have a series of 19 cases of cardiac tamponnade (muffled sounds, low arterial and higher venous pressure) treated by pericardial aspiration, with one death. At post-mortem in this case the pericardium was found to be empty, but the left coronary artery had been injured by the knife.

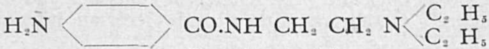
Fourth case was a coloured man in the fifties who last year had a pleuro-pericardial effusion going on to constrictive pericarditis. He had been treated by wide pericardectomy (Kieffer). During the operation the heart stopped and was restarted after 8 minutes massage. Convalescence had been stormy, but he was now well.

Blalock pointed out that the unusual feature in this case was the operation on a tuberculous pericarditis during its active phase. Streptomycin had altered the picture, and he wondered if they should operate earlier still. Harvey (Professor of Medicine) was, on the whole, against earlier operation, as acute tuberculous pericarditis did not go on to constrictive pericarditis in more than one or two cases in 30.

A short paper on Procaine Amide followed.



Procaine.



Procaine Amide.

This drug settles down auricular fibrillation, and is more useful in this condition than quinidine. It is sold commercially as Pronestil. The dose is 3 or 4 grammes a day, given intramuscularly, or by intravenous drip. It can be given by mouth.

At 11.30 Miss Riley (Superintendent of Halsted Block) came for us in her new Ford. She drove us past the docks 30 miles south to the ferry over Chesepeake Bay. The ferry boats are large Diesel driven affairs that take six lines of cars or lorries on the ground floor, and above have passenger space with a buffet. Arrived at Kent Island we crossed to East Shore, and drove about 25 miles south to Gross Coate. This part is at present pure American history, but in two or three years when the new bridge spans Chesepeake Bay it is bound to become suburbanised. Here the early settlers built their houses on the banks of the many creeks that open into the bay, at a time when water transport was the only means of communication. Here they lived in state with their slaves and kept up a trading communication with England. Each house had its quay at which the ships used to dock, and its graveyard, where the family were buried. Gross Coate is a brick house built about 1690, still in the possession of the same family, surrounded by hundred-year old magnolias and filled with the pictures, furniture and weapons of the old settlers. Later we visited Wye House across the creek, built by Lloyd, the father of the man who started Lloyd's Coffee House and gave his name to insurance, and still owned by a female Lloyd. The house was low, white wood. Around it was a formal box garden : beyond an orangery and the family graves. At the door stood the cannons that were fired to announce that the Lloyd ship had been sighted on her return voyage from England. Among the relics was a traveller's gun, a muzzle-loading flintlock in size halfway between a musket and a pistol: there were two triggers ; the first fired the charge, and, if that missed, the second shot out a bayonet.

Sunday, 8th.

Henry Bahnson, with his wife and two boys, took us for a drive round the mountains, to Harper's Ferry, where John Brown started the civil war by seizing the Arsenal with the help of some slaves. The autumn colours were wonderful, but it rained all the way and distant views were blotted out. We then went on to Washington, and looked at the Lincoln Monument, and the monument by the Potomac to merchant seamen, which impressed me in 1943 and which I wanted to see again. This is a great curling wave-top with a group of seven seagulls skimming over it as it breaks. The feat of designing and casting a flight of birds in bronze to give the impression of effortless flight is wonderful..

Monday, 9th

Operations in the morning. Blalock did a coarctation of the aorta beautifully. Bahnson operated on the old man with pyloric stenosis and Paget's disease. He turned out to have a huge pyloric ulcer adherent to the liver and common bile duct—a really difficult job.

In the evening a round of Halsted 4 and 5. My Billroth I looks well, but is being sick. As he brings up bile, it is probably the jejunal anastomosis rather than the gastro-duodenal one that is hanging him up. Among other cases we saw Bahnson's woman with the transverse rectal anastomosis. She is a severe diabetic, and there was a discussion on the difficulty of adjusting a diabetic to post-operative regime. They clearly cannot go on with their pre-operative insulin or they will go into hypo-glycæmic coma. They think the right thing is intravenous glucose, with one unit of insulin to each 2 grammes of glucose.

(*To be continued*)

Dental Clinical Meeting

3RD MARCH, 1951.

AS has been the custom for many years the Dental School held a Clinical Meeting during the day upon which the Annual Dinner of the Dental Society was held.

This meeting has always proved a popular function, and this year it seemed as if many more old Guy's men were present. In addition there were many student visitors from other Schools. There was a great diversity in the form of the demonstrations given—ranging from table demonstrations to major surgical operations on the mouth. Perhaps the outstanding feature of the meeting was the collection of clinical cases which were shown during the afternoon by the members of the Dental and the Surgical Staffs. These consisted of the more interesting pathological conditions occurring in the mouth such as adamantinoma, fibrous dysplasia and malformations, to mention only a few of the forty to fifty cases demonstrated.

Some 360 people were present at the Dinner of the Dental Society which was held at the Park Lane Hotel. The Royal toasts were proposed by the President, Mr. Arthur Bulleid. Mr. Farrer-Brown, Secre ary of the Nuffield Foundation and a member of the University Grants Committee, proposed the toast of the Hospital and School, which was received with acclamation. Sir William Kelsey Fry replied in terms which were very well received by everybody present. Professor Rushton proposed the toast of the guests who included Lord Cunliffe, Chairman of the Board of Governors of Guy's; Professor Lillian Penson, Vice-Chancellor of the University of London; Professor Wilkinson; Dr. Fish; Mr. Farrer-Brown; Dr. Senior; the Directors of the Dental Branches of the Royal Navy and Royal Air Force; the Deans and Sub-Deans and the student representatives of other Schools. Also present were many members of the Medical, Surgical and Academic Staff of Guy's, including Mr. Slesinger, Professor Johnston, Sir Heneage Ogilvie and Dr. Boland.

In response, Professor Penson spoke of the great interest which the University continues to take in all matters appertaining to dental education.

Dr. Marston reminded those present of the distinguished career of the President when he proposed his toast. Mr. Arthur Bulleid, who was greeted with prolonged applause, thanked everybody for the great reception they had given him. It was a matter of great delight that he was accompanied by Mrs. Bulleid, who made such a gracious hostess.

The formal ceremony terminated in sufficient time to allow everybody to continue their convivialities.

Congratulations and thanks must be extended to Mr. Neill, Mr. Pickup and all the other members of the Committee of the Dental Society on organising such a successful evening.

Reviews

The Medical Works of Hippocrates. By JOHN CHADWICK and W. N. MANN. Blackwell. *Price* 20*s.*

Scholars may quibble about the text and purists about the interpretation, but they will concern themselves only with details. Taken as a whole this is a masterly translation from the original Greek.

With a lively and acute sense of discrimination selections have been made from the mass of original writings attributed to Hippocrates, or to members of his school, and presented to the reader in this book in a most attractive form. The ordinary reader will find the prose engaging while the medical student, at any stage of his career, will find so many of the lessons therein truly salutary. If for no more than the "Aphorisms" and the "Coan Prognosis" this book should be widely read and, in so far as it may divert attention from technological pre-occupations to an appreciation of medicine as a natural study, it should serve as a guiding text to every practitioner at the present time.

A Textbook of Bacteriology. By ARTHUR BULLEID and C. W. SHUTTLEWORTH. 3rd Edition. Heineman. *Price* 25*s.*

This edition, the third, has been completely revised and enlarged. It bears little resemblance to former editions but the improvement obtained and the presentation by the authors make this an excellent and very readable introduction to Dental Bacteriology.

There are, however, certain features which bear criticism. If a discussion in Blood Grouping is thought to be necessary why is there no mention of the Rhesus factor ? As the whole phenomenon of Blood Grouping is *an antigen-antibody reaction,* surely its relationship to the problems of bacteriology might have been emphasised.

Two pages devoted to the problems of dental caries is a small contribution to a subject of such vast clinical and experimental importance. Sodium fluoride is much in vogue now and some discussion should be made as to its possible action in inhibiting carbohydrate breakdown by micro-organisms.

No clear differentiation is made on page 8 between oxidation and fermentation. Certain organisms do not take the breakdown of carbohydrates to CO_2 and H_2O but instead act in the absence of oxygen producing lactic acid. Upon this fact the whole basis of the Chemico-Parasitic Theory rests.

The illustrations are without exception of a very high order but some, especially of apparatus, could be dispensed with, e.g., incubator, page 55.

Apart from these few criticisms this book contains all that the dental student requires and it will prove valuable to him as a book of reference after qualification. J.L.H.

Radiology of the Teeth and Jaws. By FRANK L. INGRAM. Arnold. *Price* 16*s.*

This is a book of exceptional merit. It should be used by the Dental Profession and by all interested in oral and maxillo-facial problems.

Dr. Ingram has clarified both the problems of taking radiographs of the jaws and teeth and the interpretation of them. The publishers have also reproduced the illustrations in a very efficient manner and are to be congratulated.

The book is perhaps of greatest interest and value to the dental practitioner, who is also his own radiologist: it would thus be beneficial if some clinical photographs (preferably in colour) could be embodied to bear relation to the corresponding radiographs.

As there are at present few radiographers who are able to obtain such results as shown in this volume, further detailed instructions regarding the correct angulation of the head stave, even to the point of repetition, would be of considerable benefit. J.L.H.

Correspondence

Appreciation

SIR,—From time to time there appear in your columns contributions to a perennial controversy about whether the present Guy's is or is not a better place than Guy's used to be. As I have recently spent some time as a patient in the wards, perhaps you will allow me to add a word in this argument.

During the time in which I was in Guy's charge, I passed from moderate illness via an abdominal operation through quite severe sickness to convalescence. I was constantly astonished and finally deeply moved by the thoroughness of the care with which I was brought through this grim period. At its crisis, no tiniest care that could add to my comfort was omitted, no investigation which could assist recovery remained undone and no whim the granting of which could ease my mind was left unsatisfied. As the crisis passed so did this intensity of care, and I was impressed most of all in noticing that it was made equally available to all patients in need of it : I had received no special treatment.

Words are inadequate for me to express my sense of indebtedness and gratitude for all this : I will only state my view that whatever Guy's Hospital may have been in the past it is now, at present, a great and noble institution.

Yours, etc.,

G. HASLEWOOD.

307, Mile Oak Road,
Portslade, Sussex.

Autopsy Demonstrations

SIR,—I would like to place on record a few observations concerning Post Mortem Demonstrations, a criticism of which appeared in the last issue of the *Gazette.* The writer drew attention to the necessity for team work, but appears to have levelled his attack solely at the Pathologist.

If the latter is to accept this as fair and just comment, then the anonymous critic and those whom he claims to represent would do well to consider the shortcomings of other members of the team.

It should hardly be necessary to stress the importance of being in possession of the clinical history before commencing a Post Mortem Examination, and the unknown author is presumably aware of the standing orders for P.M. Clerks.

Frequently, the clerk cannot be found until a late hour, or he is never found, or, worse still, he disappears with the clinical notes into some obscure corner where no one can find him, to emerge only a short time before the demonstration is due to commence.

The attendance of the houseman at Post Mortem Examinations is an all too infrequent occurrence—with or without apologies for absence. We know that he is busy, but would appreciate some show of interest.

While in this critical mood, I would recommend all clerks to study the art of summarising. Neither the patient's movements from ward to ward nor the minute details of normal investigations is helpful in the P.M. Room, and they serve only to bury the essential facts in a welter of irrelevant detail.

I can think of no more fitting conclusion than to refer to your closing sentence in the Passim of the same issue. It is certainly a philosophy which we will all do well to practice as well as preach.

Seeking neither publicity nor anonymity,

I remain,

Yours, etc.,

D. A. OSBORN.

Dept. Morbid Anatomy and Histology.
Guy's Hospital.

Rebuilding Guy's

SIR,—I have not been home for a good many years, but I understand that Guy's was badly damaged during the war and that rebuilding has yet to be done.

I do hope that any plans for rebuilding Guy's will not sacrifice beauty for utility. I am aware that in any built-up area extension must be vertical rather than lateral. Hence the skyscraper. But there is a deplorable tendency nowadays to build awful structures described by one P.W.D. official as " four walls with a roof and a lot of windows," uncompromisingly hideous, and emanating, I believe, in the first place from America.

I always regard the South African Institute for Medical Research in Johannesburg as one of the most beautiful public buildings in the Union. It is one of Sir Herbert Baker's designs, and combines a beautiful building with a very efficient and active organisation — utility and beauty together.

I do not suggest that such a design would be in any way applicable to a new Guy's, but I do hope that those who draw out and pass the new plans will give us and future generations of Guy's men, and women, something of which we can be proud, not only for its continued efficiency, but its architectural beauty. Not just four walls and a roof and a lot of windows.

Yours, etc.,

G. DUNDERDALE.

P.O. Box 642,
Pietermaritzburg, Natal,
Union of South Africa.

Review

SIR,—What a change, and what a pleasure to find some vivid English in your columns! I refer, of course, to your review of Andrew Salter's " *What is Hypnosis ?* "

I admit that the theme of the book (" that hypnosis is essentially the production of conditioned reflexes ") at first eluded me. For I could not decide whether the hypnosis produced the reflexes, or the reflexes the hypnosis; and where Dr. Salter, and where the patient came into all this, I could not tell. However, I soon perceived that doctor, patient, and reflexes were all laid down together.

" Compressed but lacking economy " coming so hotly on the heels of " brief but not concise " seemed to commit the offence it deplored; but the splendid gusto of the attack, the brilliance of the statement, and the balancing of the phrasing were beyond reproach.

And those adjectives! " Execrable," " ugly," " slipshod," " meaningless," " tendentious dogmatism "—really, if Dr. Salter's style is as badly polished as all that, the work must be a literary rough diamond.

Legam quia illegibile.

Yours, etc.,

P. R. MONTGOMERY.

COMPLIMENTARY—I.

Below is a copy of a letter recently received at the Dental School. It is, we think, self-explanatory :—

13.3.51.

Dear Sir,

I should be obliged if you would inform me if there are any Dental Surgeons practising in . . . who were trained at Guy's.

In the past I have had dental treatment from a large number of practitioners, and of these, three Guy's men have been so outstanding in skill and consideration for the patient that I always endeavour to find another when I am in a new district.

Sport

BOXING

The Inter-Hospitals Boxing Championships were held at Seymour Hall on Monday, March 12th, when representatives from five hospitals competed. After a most enjoyable evening's boxing Guy's retained the Cup with 33 points, London being runners-up with 23 points.

Flyweight

A. Fung-a-Fat (Guy's) had an easy win in the Semi-Final and went on to beat B. Hynes (St. Thomas's) in the Final.

Bantamweight

D. Gallivan (Guy's) easily beat I. Moollan (London), the referee stopping the contest in the first round.

Featherweight

C. Buttery (Guy's) beat A. Cobb (London) on points.

Lightweight

In the Semi-Finals R. A. Peebles (Guy's) lost to the experienced N. Gelpke (St. Mary's) on points but T. M. Winstanley (Guy's) had an easy victory over D. Foreman (London) in the first round. The Final between Winstanley and Gelpke was the best of the evening and was won by Gelpke in the third round, the referee stopping the contest.

Light Welterweight

Guy's had no representative at this weight which was won by J. McCreath (London).

Welterweight

W. Watson (Guy's) beat J. Sturt (London) in the Semi-Final but lost on points to I. Sutherland (St. Mary's) in the Final.

Light Middleweight

A. Atkinson (Guy's) won his Semi-Final against P. Eckhart (St. Thomas's) but was beaten by C. Western (London) in the Final.

Middleweight

After a very hard-hitting Semi-Final B. Cremin (Guy's) beat G. Bradford (St. Mary's) the contest being stopped in the second round. In the Final Cremin was out-pointed by D. Durcan (London).

Light Heavyweight

D. Lipington easily outboxed N. Wright (London) and the contest was stopped in the second round.

Heavyweight

M. Bishop (Guy's) beat D. Evans (London) in the first round of the Semi-Final. In an all-Guy's Final M. Halamandres beat M. Bishop the referee stopping the contest in the second round.

The two special prizes for the best boxer of the evening and the best loser were awarded to N. Gelpke and T. M. Winstanley respectively.

Our thanks are due to Mr. J. H. E. Winston, the Secretary of the United Hospitals A.B.C., and to all the other officials and helpers who contributed towards a most enjoyable evening's sport.

COMPLIMENTARY—II.

" You may be interested to hear that the *Gazette* has achieved fame even in this little corner of the world. There are only three Guy's men in this state—Gwynne Williams, the psychiatrist, who is semi-retired, W. A. Young, the bacteriologist, who came out with me, and myself. I don't know whether either of the other two get the *Gazette* but someone knew that I did and the B.M.A. Library here (which, of course gets the Reports) wanted the October 7th issue in a hurry for a member searching for information on Eumydrine in Whooping Cough. I was proud and delighted to produce it."

—from Dr. D. S. R. Snow, Perth, W. Australia.

ENQUIRING.

The following letter was recently received—and courteously acknowledged —in the Superintendent's Office :—

Dear Sir,

Please I have been reading in a newspaper a very well-read paper the following news. Woman in France gives birth to Test Tube Baby. Please could you tell me how does she arrive at that Test Tube Baby idea, does that ever happen in England, or does the women ever be looking for Serum. I am a countryman single and maybe it is between man and wife.

Please I don't know what to say but I feel very healthy and offer to (obl) assist any woman. Maybe I am thinking up the wrong street probably that happens with married couples. Other men tell me that they are always welcome in England and U.S.A.

Hospital Information, etc.

PASS LIST

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.

Final Examination
January, 1951

Part I.—*Surgery*

S. G. Baker
E. M. Bearn
A. J. Bligh
R. M. Clarke
R. E. Collinson
P. D. Daw
R. J. G. Day
S. S. R. Earl
P. Elias
J. R. Flynn
Miss A. R. Fooks
T. B. Forward
A. G. P. Jennings
D. M. Kent
R. E. Lee
D. G. Matthews
J. H. McCormick
R. V. S. Muscat
D. J. Neill
P. L. Pickett
K. H. Pickup
H. R. Prentice
N. E. Price
F. Roth
R. D. Rowe
P. M. Rusden
L. Schwarz
Miss N. Shotts
I. I. Singer
J. Stott
P. Sykes
J. S. Tisdall
J. C. Walby
P. W. P. Warren
W. C. Whaites

Part II.—*Dental Surgery*

M. F. Ashby
P. W. J. Bosman
R. C. Bret-Day
H. G. Carr
G. V. Crine
L. Dawson-Squibb
A. G. Gapper
P. D. V. Harrett
P. R. Jones
H. Levison
N. I. Lewis
D. M. J. Lyons
K. F. C. Muncey
R. E. W. Pearce
M. J. Quelch
L. Schwarz
W. M. Sheeran
P. A. Swift
R. L. G. Thornton
R. B. Whalley

UNIVERSITY OF LONDON

Examination for the Academic Postgraduate Diploma in Medical Radiology (Diagnosis)

February, 1951

Part I.

A. T. Broadbridge
D. Datt
M. Simon
D. G. C. Whyte

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
February, 1951

Surgery

P. N. Barua
*G. Dixon

Pathology, Bacteriology and Forensic Medicine

*J. E. K. Moore

Medicine

*H. G. Hexter

Midwifery

*J. E. K. Moore

*Have completed the examination.

UNIVERSITY OF CAMBRIDGE APPOINTMENT

Sir Alan Filmer Rook, K.B.E., C.B., F.R.C.P., D.P.H., has been re-appointed Senior Health Service Officer until the retiring age.

DEBATING SOCIETY

An open debate is to be held on Monday, 23rd April, when the motion will be " That this House demands a National Lottery." Place and time of meeting will be announced later.

PAPERS BY GUY'S MEN

Shaw, A. Batty. Spontaneous Pneumothorax from Secondary Sarcoma of Lung. *Brit. Med. J.*, 1951, i, 291.

Stafford-Clark, D. Painful Myostatic Dystonia. A Diagnostic Problem Treated by Psychotherapy and Unilateral Lobotomy. *Amer. Pract. & Digest of Treatment*, 1950, i, 1137.

Stevenson, F. Harwood. Fanconi-Type Resistant Rickets. *Proc. R. Soc. Med.*, 1950, **43**, 907.

Tulley, W. J. Three Cases of Unerupted Deciduous Molar. *Dent. Rec.*, 1950, **70**, 231.

Verel, D. Postural Hypotension: The Localisation of the Lesion. *Brit. Heart J.*, 1951, **13**, 61.

Warren, M. D. Turmoil at the Royal College of Physicians. *Practitioner*, 1951, **166**, 176.

CHANGES OF ADDRESS

J. W. Doherty, L.D.S., R.C.S., Elsted, Nr. Midhurst, Sussex. Tel.: Ingram's Green 49.

A. W. Holman, L.D.S., R.C.S., 1, Osborne Road, Newcastle-upon-Tyne 2.

R. L. Luffingham, M.B., B.S., 185 Ballards Way, Addington Hills, Surrey.

G. R. M. Mote, L.D.S., R.C.S., 1, Station Street, Lewes, Sussex, and " Deepdene," Headland Avenue, Seaford, Sussex. Tels.: Lewes 467 and Seaford 2826.

P. S. Norris, M.R.C.S., L.R.C.P., Summer Cottage, St. Osyth, Essex. Tel.: 368.

T. C. L. Parry, M.A., M.B., B.Ch., D.R.C.O.G., 101, Empingham Road, Stamford Lincs. Tel.: Stamford 3286.

I. T. M. St. George, L.D.S., R.C.S., Brookdale, Brookley Road, Brockenhurst, Hants. Tel.: 3214.

J. F. Swan, M.R.C.S., L.R.C.P., Horsecroft, Storrington, Sussex. Tel.: Storrington 440.

L. Bargrave Weaver, L.D.S., R.C.S., 80 Park Street, Grosvenor Square, London, W.1. Tel.: Mayfair 2678.

CORRECTION

I. O. Enos, L.D.S., R.C.S., 24, Tonbridge Road, Maidstone, Kent. Tel.: Maidstone 3128.

BIRTHS

BIRTWHISTLE.—On March 7th, 1951, at the Hill Nursing Home, Reading, to Valerie (née Wagnell) wife of T. Denys Birtwhistle, B.D.S.—twin sons (Roger and Peter).

HARRETT.—On February 19th, 1951, at Beresford Nursing Home, Swansea, to Lottie (née Witness), wife of Peter Harrett, L.D.S., R.C.S.—a son (Hugh Vaughan).

HUMPHREYS.—On January 16th, 1951, to Evelyn, wife of W. H. Humphreys, M.B., B.S.—a brother for Ruth (Philip Heber).

MARRIAGES

BRUNSDON—STUBBING.—On March 10th, 1951, at Sutton Congregational Church, David F. V Brunsdon, M B., B.S., to Dorothy M. Stubbing, S.R.N.

DEATHS

CHAPMAN.—On January 20th, 1951, C. L. Granville Chapman, F.R.C.S., M.R.C.O.G., of Fairacre, Roehampton, S.W.15.

DYKES.—On February 24th, 1951, at Hove, David Garfield Dykes, M.B., Ch.B.

EDS. {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

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PASSIM

THE ever-changing pageant or gloom of fashion, to which we referred in the last issue of the *Gazette*, is really but a manifestation of the succeeding moral and artistic aspirations of society. To agree with the oft-reiterated declaration of a famous headmaster that " over a soft collar you will always find a soft head," or immediately to deduce, as a senior physician and examiner has publicly admitted, that because a candidate in the M.B. finals affected dilapidated grey trousers and shapeless sports jacket he was " a careless thinker and a lousy so-and-so " may well be carrying the lesson too far. On the other hand, an obvious care for appearance does imply a fastidious and self-conscious character. Who would doubt that the " more than ordinarily groomed look (and) brilliant respectability " with which Galsworthy credited his Forsytes was anything other than an expression of " the high moral purpose to which the Victorians held fast in life and art " and which " the scientific spirit of the age challenged in vain " ?

Yet what to us appears in retrospect as an era when hypocrisy held sway over conscience gave way in its turn to a fervent " rationalism "—a new surge of objectivity and social justice which from its fountain-head in South Kensington poured forth, as it was thought, to irrigate ever-wider territories by the restless, crusading efforts of Huxley, Wells and others of that school.

Today we have discovered that Reason is not all. Science, the instrument intended for human salvation has, instead, become a tool of self-oppression. We are, indeed, slaves to our own much-vaunted logic and relentless machines. In the art of leadership, by contrast, we are proving ourselves pitiful exponents, while in default of moral standards we assume the facility of expediency. With leadership, however, we should never confuse demagogism—that appeal to the more impressionable nature of the people by colourful oration and haranguing phrases, nor, for moral standards, should we adopt those rules of behaviour that suit our purpose rather than expiate our souls. One of the reasons why the Victorian regime failed to survive was simply because it made these essential mistakes.

Every member of the community carries his obligations in this respect. As members of a profession, however, our moral burden is even heavier. Medical men are entrusted with numerous privileges. They are charged with the confidences of their patients and are, furthermore, the very negotiators in matters of life and death. In such a position they can exert a considerable influence upon their fellows. Yet, for all the stringencies of a medical training, the final selection comes not by moral standing and excellence of character but by mere scientific competence or examination proficiency. Thus it is that there is thrust on to the mass of unresisting society a number of doctors who, adept as they may be at the various medical manœuvres, are lacking in some considerable measure the nobility of purpose and liberal attitude of mind which, alone, should allow anyone to have jurisdiction, physical or mental, over others. In time, fortunately, those who as youths are most to blame in this respect learn better as they mature. The medical profession must nevertheless be on its guard, not only defending its administrative and quasi-political rights, like questions of remuneration, size of " panels," constitution of Health Service committees, rights of appointment and so on—all of which figure prominently and acrimoniously in the medical and topical press, but also setting an example in the way it treats with others as humans. Just because the doctor is qualified to speak with some authority about health and disease that gives him no equal right to pronounce superiorly on any other situation that may arise, whether that should concern politics, sport, dealing with others in the medical service who happen not to be qualified or even behaviour at the meal table. Until members of the profession can show by their bearing and demeanour that they are worthy of respect they will receive only that which is due to them by law, and that grudgingly !

In simple terms, of course, this is largely a matter of manners. Those working within a hospital community should be particularly mindful of this. No longer is a patient admitted to a ward to be under the exclusive care of one consultant. For the purpose of investigation and treatment the patient is the focus of the efforts of a whole army of experts. In addition, where teaching is carried on as well, he is the centre of attraction for a succession of students and series of rounds. To say that in the midst of all this he is bewildered is to put it mildly. In his helplessness he may very well become alarmed. All the more important then that he should have one confidant to whom he can always turn for encouragement and advice. Thankfully there appears above each bed at Guy's the name of one consultant and not, impersonally, the title of a department or unit. The ultimate responsibility for the patient must be accepted by that consultant and, in the day-to-day management, by the house officer concerned. Strictly speaking, nothing should be done to any patient of which his house officer is unaware and for which, in many instances, his prior permission on behalf of his chief has not previously been obtained. Frequently some exercise or investigation under contemplation carries with it a degree of risk. A frank discussion with the patient, who is after all a direct accomplice in the adventure, must be undertaken in good time beforehand and it is the house officer in charge who must not only take the initiative in such a case but be sufficiently informed to do so with an open mind.

The personal relationship has survived at Guy's probably longer than elsewhere. All the more reason then that this arrangement should be preserved in the future. It behoves each consultant to see that the interest he takes in every patient admitted to his beds should be a real and not a nominal one and that his visits should be such that he can properly follow and indicate the conduct in each instance. The great majority of the staff naturally do this. It is even more imperative that everyone else at large in the Hospital should be aware of this practice and should, for their parts, conform to it. Never before has it been so desirable for those working in the Hospital to remind themselves of the canons of professional conduct and graciously to observe the niceties of professional intercourse.

* * *

Congratulations are offered to W. vans Agnew upon his selection as Captain of the Scottish team in the recent hockey international match with Ireland and the forthcoming one with Wales.

* * *

Readers are reminded that applications for tickets for the Residents' Ball should be sent in before April 14th. Such is the demand that any requests, or even appeals, received after that date cannot be considered. And, on the subject of social affairs, it is rumoured that the Clubs' Union is contemplating an Annual Ball as well, the first of such events probably to be held at the end of the year or early in 1952.

Foot Problems and Plastic Surgery

By NILS L. ECKHOFF, M.S., F.R.C.S.

A Clinical Lecture delivered in Guy's Hospital Medical School on 1st March, 1951.

LADIES AND GENTLEMEN.—The face is usually considered to be the peculiar domain of the plastic surgeon. It is true that he devotes much of his time to the head and neck. His ubiquitous wanderings do however not infrequently lead him to the other end of the body. It is therefore worthwhile considering such problems as may arise and the possible methods of dealing with them.

Burns are not particularly common. Boots, shoes and slippers are usually sufficient to protect the foot from such injury ; (even the thinnest of gloves was frequently sufficient to protect the hand in aircraft burns). That ghastly burn in women, occurring when the nightdress (often of plastic material) catches fire, travels upwards, thus sparing the feet but causing untold damage to the legs, trunk, neck and head. In children scalds, from the overturned kettle or from stepping into a bath of boiling water, often involve the feet.

Traumatic injuries frequently involve the toes or heel. It is surprising that heels are not more often torn off, when the pedestrian rushes across after the lights have changed.

Congenital anomalies of various kinds occur—syndactyly, polydactyly, lobster foot, and congenital amputations and constriction bands.

Pressure sores are common on the heel, particularly in paraplegics or patients with severe burns or other injuries, where frequent changes of position are either neglected or impossible.

On the sole the commonest lesion needing attention is a verruca—usually one that has already passed through many hands.

VERRUCA PLANTARIS.

Let us, therefore, spend a few minutes considering this condition. It is very important that it should not be confused with a callosity—which is a very common condition. A callosity only occurs at a point where undue pressure is exerted, and is a heaping up of epidermal tissue at this point. There may be a central dimple, and in later cases an actual breach of surface, i.e., an ulcer. The condition is often very painful. Treatment consists in continued chiropodial attention, and orthopædic attention to overcome if possible the cause of the pressure. It will not respond to many of the measures used in the treatment of verruca.

Verruca may be situated anywhere on the foot and is almost certainly a virus infection. It is well known that it will spread from one part to another (and is therefore frequently multiple), from one person to another, and even through a community, such as a school. On the heel or toe it may resemble the common wart of the hand, but on the sole is more often flat, with a furrow surrounding it, resembling the bigger vallate papillæ on the tongue. It can be quite painful.

Multitudinous treatments have been recommended. Wart charmers often have their successes. Some will disappear if kept covered with elastic adhesive bandage for six weeks. There is no doubt that the chiropodists are very skilful at dealing with others, by repeated parings and various chemical applications. Some are treated by enucleation with a small curette, but I believe recurrence is common with this form of treatment. Simple excision is unsatisfactory, for suture is not likely to be easy and re-infection of the wound not uncommon. Excision and free grafting is likewise unsatisfactory. Enucleation followed by diathermy to the base would seem more rational, and often results in cure.

The many methods in vogue indicate that no single treatment is always satisfactory. The more recalcitrant cases are often referred for radiotherapy. Here again skilful treatment can be extremely satisfactory. But I am sorry to say that we frequently see cases where radiotherapy has not been so skilful, with the result that the verruca is replaced by a radionecrotic ulcer, much bigger and deeper than the original lesion, with a variable area of skin ulceration around. The plight of these patients can be pitiable in the extreme, and we often have to embark on a series of operations to replace the damaged skin.

MR. E. G., 32 YEARS.

History of " verruca " on the sole of his left foot for 5 years. Treated with nitric acid which produced an ulcer. He later had X-ray treatment, 21 treatments being given in 18 months. This was followed by further nitric acid. There was a deep ulcer about 1 inch in diameter extending down to the bone, with a sloughing base, in the region of the 4th metacarpal head. The surrounding erythema extended for 1–2 inches.

9.6.50. Flap delayed on right calf.

20.6.50. The ulcer was excised and flap attached.

10.7.50. Leg separated and base of flap set into donor area.

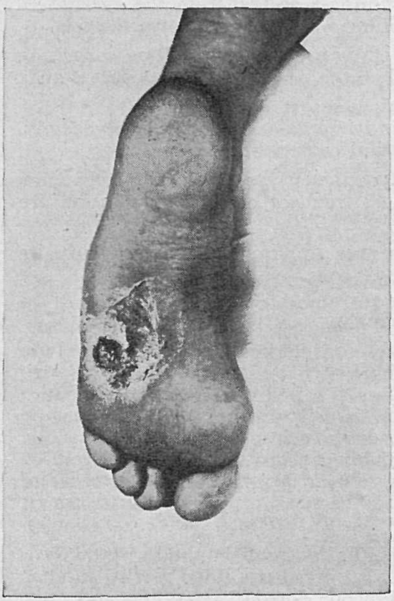

Photo 1.

Plantar Wart with surrounding re-action from X-Ray treatment.

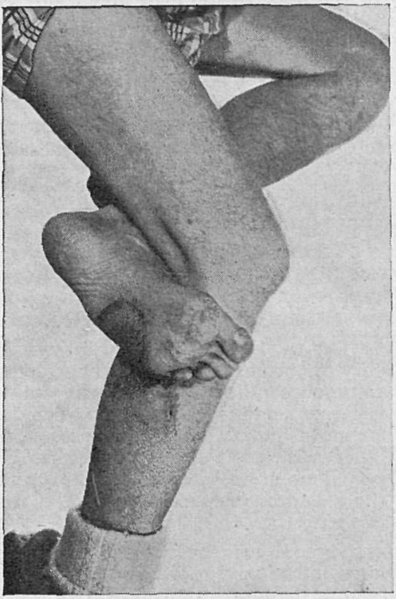

Photo 2.

Position occupied during transfer of flap.

I have quoted this case first because the results of crossleg flaps are so dramatic in lesions of this sort. Provided some care is taken in planning, the result should be eminently satisfactory.

The area to be excised is carefully marked out with pen and ink (the modern ball-pointed pen is useful), taking good care to extend well into healthy tissue. There is never any need to be niggardly in the excision. Small flaps are more difficult to work with than big flaps. The exact shape of the area to be excised is now cut out of a piece of batiste or similar sheeting, which is kept as a pattern. Yet another pattern is cut, this time with a pedicle, taking good care that the pedicle is adequate. In the calf (the usual donor area) the pedicle should, if possible, be as broad as the flap is long. This explains why big flaps are better than small flaps, for in the latter the pedicle would be unduly long to carry a satisfactory blood supply. The legs are now placed together in a comfortable position taking care to see that bony points do not press on one another, and the pedicled pattern placed across from one leg to another. The legs are now drawn apart, and the pattern marked out on the donor limb. This careful planning is carried out a day or two before the operation. Sometimes the legs are placed in plaster casts at this stage with windows cut for the flap and defect. If there is any doubt about the blood supply of the flap, it may well be " delayed " at first operation. This means that incisions are made along the sides of the future flap, down to the deep fascia, and most of the flap is lifted, and then returned to its place. This encourages blood flow along the length of the future flap.

At the main operation—ten to fourteen days later—the diseased tissue is removed, the whole flap is lifted, and the raw surface from which it came is covered with a razor graft. The legs are brought together, and the flap sewn into the defect. The legs are usually fixed in plaster of Paris. After two to three weeks, the flap is detached from the donor leg.

These grafts will gradually obtain a new nerve supply. Research has shown that it can never be better than that of the part from which it came. It will probably be a good deal less sensitive than the rest of the sole, and must therefore be protected from irrational use and trauma.

Crossleg flaps are usually derived from the opposite calf, but may be taken from the opposite thigh. If stiff joints or absent parts preclude these areas, tube pedicles or open jump flaps may be required. These are usually prepared on the abdomen, attached to the wrist, and transported to the site in this manner. At least one additional operation becomes obligatory, and there are hazards at each step.

It is, of course, incorrect to imagine that flaps from a distance and tube pedicles form the first line of defence in plastic surgery. If in any way possible, tissue from the immediate neighbourhood of the defect is used. Apart from being less hazardous, it gives the best cosmetic and functional result. It so happens, however, that the skin of the sole is so thick, so firmly attached, and so accurately fitting, that practically no displacement is possible. On the dorsum there may appear to be excess of skin, but this is really only sufficient to allow of free movement of the toes. A small defect could no doubt be repaired with local flaps. At the back of the heel, where *pressure sores* are so common, it is sometimes possible to close a moderate defect by two V–Y advancement flaps, one from each side in the submalleolar region. If the pressure has been sufficient to expose bone (as in paraplegics) some bone may have to be removed, thus reducing the prominence of the heel, and making restoration possibly a little easier.

Flaps from neighbouring parts are also of little usefulness, though a method has recently been described by Gurdin and Pangman for closing a defect after excision of a lesion over a metatarsal head, by using the skin from a filleted toe.

Free grafts are probably rarely called for on the sole of the foot. They have not sufficient thickness, and would probably not stand up well to wear and tear. They may be used in covering a burn of the dorsum, either at the stage of primary skin cover, or at the stage of secondary replacement of scar. Razor grafts are in general most satisfactory for this purpose, and the whole of the dorsum could easily be covered. Pinch grafts or postage stamp grafts are usually reserved for covering large areas on the trunk or limbs, and are not suitable for the foot.

Whole thickness (dissected) grafts have probably no place in the surgery of the foot. They may be excellent on the face, but are sometimes liable to odd colour changes being either too white, or brown, or even yellow.

OTHER CONDITIONS.

Dupuytren's contracture is a condition occurring in the hand in which the palmar fascia is infiltrated with fibrous tissue and contracted, producing one type of claw hand. These cases are often referred to us, and are treated by excision of the whole of the affected tissue. Occasionally we find a similar contracture of the plantar fascia in the foot, of which I am able to show you an example. It is similarly treated by excision of the thickened fascia.

Congenital amputations and *congenital constriction bands* are also referred to the plastic surgeon. Many theories have been devised to explain their occurrence, but the true pathology is naturally unknown. I am able to show you a slide of both deformities occurring in the same child. There is little to be done for absent toes. Absent fingers have been replaced by complex grafting procedures—the value of which is open to question. Absent thumbs are more pressing, and an index finger may be transposed to make a very useful thumb. This case shows constriction bands of a finger, the leg and a toe. The bands may go down to the deep fascia and œdema is to be expected in the part distal. Simple excision and suture is of no avail. The circular scar line must be broken up. This is achieved by interdigitating flaps, or the so-called " Bishop's Mitre " operation.

Supernumerary toes may call for treatment. In this case the big toe was doubled, and also projected at right angles to the foot. The extra toe was removed, the muscles freed, and the skin so adjusted as to avoid scar contracture. The toe can now be placed alongside its fellows, though the foot is broader than the normal and special shoes will have to be made.

Finally, I should like to show you an example of *ingrowing toenails* in a baby to illustrate that the malady is at least in part due to abnormal nail shape. At the other end of the age group we find that remarkable condition of *onychogryphosis*, which for its cure requires an operation for complete removal of the nail bed.

I have indicated some of the foot problems that are sent to us for correction. You will see that the field is vast and various.

Gurdin, M., and Pangman, W. J., (1950), *Plast. and Reconst. Surg.* 5, 516.

Guy's Diary

April		ACADEMIC
9th	1.00.	Mr. Atkins. Clinical Lecture. "Broken Ribs and Other Common Injuries."
12th	4.30.	X-Ray Meeting. Gordon Museum.
13th	1.00.	Dr. Hardwick. Clinical Lecture. " Hypothyroidism " (Gull's Disease).
	2.15.	Combined Round. Preclinical Classroom.
16th	1.00.	Mr. Law. Clinical Lecture. " Subjective Visual Disturbances Arising from Intra-Ocular Disease."
17th	1.00.	Dr. Baker. Clinical Lecture.
19th	1.00.	Mr. Willmore. Clinical Lecture. " Speech Pathology and Therapeutics."
	4.30.	X-Ray Meeting. Gordon Museum.
20th	2.15.	Combined Round. Preclinical Classroom.
23rd	1.00.	Dr. MacKeith. Clinical Lecture. " What Fit is This ? "
30th	1.00.	Mr. Stamm. Clinical Lecture. " Surgical Treatment of Arthritis of the Hip."

Obituary

D. A. PARSONS, L.D.S., R.C.S.

Miss L. G. Oldendorff, Matron of the Bath and Wessex Orthopædic Hospital, writes :—

ALTHOUGH rather late, may I be permitted through the columns of the *Gazette* to pay a small tribute to the late Mr. D. A. Parsons, L.D.S., R.C.S., whose tragic and untimely death in January last caused deep sorrow to all those with whom he had been associated in Bath.

Throughout the many years he worked at this hospital the children were his first concern. Not only did he manage to maintain a high standard of dental " fitness " among the patients during the difficult war and post-war years but he was a true friend to the hospital and interested in all that concerned its well-being.

His passing has left a gap it will not be easy to fill.

Concussed or Drunk ?*

By W. FYFFE DORWARD, B.Sc., M.B., Ch.B.

Police Surgeon to the City of Dundee and Lecturer in Forensic Medicine to the Medical School of St. Andrew's University.

DR. KEITH SIMPSON has given you a survey of the types of head injury which are accompanied by some visible injury to the scalp, skull or brain, or which are followed by some form of traumatic intracranial hæmorrhage. I wish to refer shortly to a subject closely related to these.

Functional disturbance—concussion of varying degree—nearly always follows violence to the head, whether that violence be direct or indirect. Such disturbance can be of great medico-legal importance.

Many of you must have had personal experience of concussion, in games if not in everyday life, and the main symptoms and signs must therefore be familiar to you. The rugger player who has fallen heavily in a tackle rises to resume his game, somewhat dazed, but still determined to keep going. His play is less skilful, his team-work has gone. He gets in the way of opponent and colleague alike, and his actions become automatic rather than purposeful. After the game he shows complete or partial amnesia, and has a sick headache rather like the " morning after " feeling which some of us know too well !

The effects of concussion, in fact, may closely resemble those of alcohol—both the immediate effects, and also those more remote. Hence the practical importance, medically and legally, of the differential diagnosis between concussion and alcoholism.

The two conditions resemble each other in that there is subtle departure from the normal, even in their more minor degrees. Actions are automatic and clumsy, often with obvious efforts to concentrate. There is obstinate refusal to stop, or go easy, or lie down to rest, with resentment of, and irritation towards, advice and well-meaning help. More severe cases show confused cerebration, loss of time sense, and disorientation.

If concussion is present, geniality has gone. Quick changes of mood characterise the alcoholic, whereas the concussed person tends to be indifferent or unfriendly. His face is pale, his pulse is rapid and of poor quality, while his pupils tend to be contracted and lack the typical sluggish reaction to light caused by alcohol.

When the person has had a more severe head injury, signs follow which are more characteristic. Compression or contusion of the brain due to fracture or hæmorrhage may be present, producing a full pulse, a deeper coma and perhaps focal signs of paralysis. He is not easily aroused, as the drunk still may be, and mistakes in diagnosis are unlikely. In any case, if the drunk man is comatose, differential diagnosis at the police station, or in your surgery, is not of practical importance. He is now drunk enough to be a case of acute poisoning, calling for immediate hospital treatment rather than detention in a cell, a fact which is being increasingly recognised by police officers.

After you qualify as medical men and women, you will (sooner or later) be called upon to give evidence about the effects of alcohol on the responsibility of the individual. Such cases mainly arise out of Section 15 of the Road Traffic Act, which makes it an offence to be " under the influence of alcohol and/or a drug, to such an extent as to be incapable of having proper control of a mechanically propelled vehicle " while in charge of same.

Just as there are degrees of concussion, so there are degrees of intoxication. The medical witness is asked to give an opinion as to whether the individual charged was at the time of the examination above or below the border line.

It is very important to keep in mind that his incapacity may be due either to concussion or to the effects of alcohol, and to try to distinguish which you are dealing with. If there has been an accident, both may be causal factors of the condition. The driver may have been drunk first, and become concussed by the accident. Or he may have been perfectly sober till concussion occurred, and been given liquid " first aid " by a well-meaning civilian who happened by.

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* *Being a resumé of some remarks made by Dr. Fyffe Dorward following a lecture on Blunt Head Injury given by Dr. Keith Simpson on 14th November,* 1950.

How can you tell? A thorough examination is necessary before a diagnosis is reached, and for this purpose the history is invaluable. Get this from the police first, then (if possible) from the examinee. Run the risk of the opposing lawyer calling you a " prejudiced witness " because you enquired about recent happenings.

So far as the examinee is concerned; if he is concussed, he has no clear recollection (if any at all) of what happened. The alcoholic's recollection is at first confused, then becomes clearer on questioning. Or he sullenly refuses to discuss the matter at all.

Quick inspection for evidence of a head injury must be made, even if there is no history of such, and signs of vomiting noted. In concussion, vomiting heralds a rapid improvement, whereas the drunk may be little better of his sickness. Red and blood-shot eyes, with pupils reacting slowly and incompletely to light, point to alcohol. A flushed face, and slightly moist skin also indicate alcohol, whereas the pale and clammy skin of concussion may be characteristic. Alcohol gives a quick pulse of good volume, as contrasted with the rapid feeble pulse in concussion.

The rate of respiration may be little altered in either condition, but the drunk man sighs, and puffs or whistles, from time to time, with an occasional eructation which is highly suggestive.

Should both concussion and alcoholism be present, the picture will be somewhat complicated. It is quite impossible, even after long experience, to sort out and assess the importance of the one or the other in producing the incapacity. In any case, the person being examined is, if concussed, a patient requiring treatment.

I shall illustrate this by three personal examples :—

Case A. A medical student, the son of a colleague, skidded into a street lamp on his way home from a Union function. His father's new car was smashed. When I saw him he seemed uninjured, but had obvious concussion. I sent him home to bed, instead of examining him for the police. Next morning he had no memory whatever of the previous evening's events, and there was no charge (except for repairs to the car).

Case B. A dental student, driving home from a dance, jammed his two-seater under a tramway repair waggon, but escaped injury to himself. When I examined him at the police station, I felt that $C_2H_5O\,H$ was probably responsible for his condition, but definite signs of concussion were present and I sent him home under police escort. They dropped the charge because of lack of medical or other evidence. Weeks later his mother privately thanked me for my " kindness to John." Obviously her son had a pretty clear memory of all that had happened that night, and had had only slight concussion.

Case C. In this case also the driver had been in collision with a lamp standard. I found evidence both of alcoholism and concussion, and as the man was one of my own patients I got a colleague to confirm this. The Fiscal decided to prosecute, and we doctors were called for the defence. We agreed that a minimum amount of alcohol, plus a considerable degree of concussion, might well explain his complete incapacity at the time of our examination. The Sheriff convicted, however, on the evidence of several civilians, who separately spoke to the accused having been drunk *before* the accident.

One last piece of advice to you. Never attempt to define drunkenness in the witness box, nor use the words " drunk " or " intoxicated " in your evidence. Stick to the words of Section 15 of the Road Traffic Act " under the influence of alcohol to such an extent . . ." and give your opinion as to the likely effects on the actions at the time of the alleged offence. The accused person may have been in charge of a bicycle, a horse-drawn vehicle, a donkey cart, or even a tram. Or he may have been a licence-holder in charge of his premises, or a constable on duty. I have had to deal with each and every one of these cases, during the past 20 years. The " fitness " required for proper performance varies tremendously with the " duty " in hand, and common sense as well as medical knowledge should guide you in coming to a decision and framing your opinion. Remember that, as an expert witness, you must endeavour to be completely unbiassed.

"Baltimore and Boston"—a Diary

By SIR HENEAGE OGILVIE, K.B.E., M.Ch.

(*Continued*)

Tuesday, 10*th*.

8.15. Kieffer, under Blalock's direction, doing a thymectomy for myasthenia gravis in a man of 50. Split sternum approach. The thymus was rather indefinite in a lot of fat, and the operation was more difficult because the man had had a thyroidectomy. Nice job.

I then did a gall bladder in a fat negress. Kocher incision: anxious to have room I made the skin incision too long, but deep part across the rectus only. Common duct looked normal, but as stones were tiny, there had been jaundice and the head of the pancreas felt lumpy, I asked Ravitch to wash and feel. Eventually I incised at the angle of hepatic and common ducts, passed a catheter, later a probe into the duodenum, and washed out, suturing the incision in the duct. I tried the plan of first dividing the cystic duct and artery and then separating gall bladder fundus down, and it seemed good.

Wednesday, 11*th*.

I started the day attending Blalock's Clinic, an hour's discussion on the surgical treatment of tuberculosis of the lung. The text was a young negro who had been attending on and off for four years. He had an acute onset, massive disease in the left lung and early disease in the right. Under streptomycin and bed rest the lesion on the right had cleared up, but the left advanced to cavitation. He had been treated by left phrenic crush and pneumoperitoneum, and the last radiographic analysis, a series of tomograms, showed two or three large cavities on the left. I was interested in the tomograph of the peritoneum. The left diaphragm had come up to the 4th rib, and the splenic flexure had followed it up, being well above the left lobe of the liver and the stomach. It seemed to contradict the claim of anterior-gastrectomists that their stoma lies well above the colon.

The advantages, drawbacks and dangers of pneumo-thorax as a method of treatment were discussed. In this case the relative indications for pneumonectomy and thoracoplasty were debated. Blalock considered that pneumonectomy, by asking the other lung to fill both sides of the chest, would almost certainly light up its old disease. He favoured thoracoplasty in three stages, and pointed out that this did not prohibit later pneumonectomy, in fact made it safer. Kieffer had done ribs 1, 2 and 3, a few days ago.

I then went to surgical out-patients and was shown the whole set-up, on the whole very similar to ours. After registration, the preliminary sorting is done by a steering officer. The urgent cases are sent by him, or arrive direct, at the accident department, which is served by men of the Junior Resident (Registrar) status, where they are dealt with or admitted promptly.

Stafford was doing out-patients with a group of third-year men. He is a natural born clinical teacher, and was handling out first-rate practical instruction From 11.00 to 12.00 four or five cases specially selected for teaching were demonstrated. One interesting one—a coloured woman who had had a radical mastectomy on the left side and had developed a septic ring finger on the same side. A streak of lymphagitis (hard to see on the dusky skin) ran up the inner side of the forearm, up the back of the arm and across the deltoid to the scapula, being lost there.

From 12.00 to 1.00 Stafford gave the first lecture on surgical anatomy to commencing students. He started with two cases of skin grafts, and discussed all the properties of skin as a tissue.

In the evening we had dinner with Dr. Firor at his house. Firor is high up in the American Board of Surgery, and we discussed the education and certification of a surgeon.

Thursday, October 12*th*.

I attended Dr. Harvey Stone's surgical round. Two cases. First, a man with a long history of recurrent left-sided abdominal pains, obstruction, for which he had been advised and refused an abdomino-perineal resection "elsewhere," pneumaturia, and finally a left-sided abscess for which a transverse colostomy had been done. In the discussion the students seemed to have read all the latest papers on diverticulitis, and reference was made to one some years ago by Smithwick analysing a large series in Boston. The students and Stone favoured resection of the affected segment after the sepsis had cleared up; I wonder how often in diverticulitis the affected part is segmental enough for resection. The second case was a chronic duodenal ulcer in an oldish Italian, with a very deformed cap.

I went on to the tumour clinic, run by Dr. Ward. Many cases. Cancer of the lip treated by excision and radiation; a fresh, small ulcer in the irradiated part; was this epithelioma or a radiation necrosis? An old lady of 70 plus with a large epithelioma of left tonsil and a mass in the neck, treated a few months ago by implantation of radon seeds (used a lot here); present condition almost normal. A boy of 12 who had a left hemithyroidectomy for papillary carcinoma; later a block dissection of the left side of the neck; now a few glands could be felt below the mastoid; the boy looked well and the glands probably meant nothing. A young negro girl who had had (1) a neuro-sarcoma of the abdominal wall treated by excision and grafting, (2) a carcinoma of the rectum treated by abdomino-perineal excision. An old man who had had a sarcoma of the right cheek and a large squamous epithelioma of the lower lip excised; he now had two rodents of the face, a large rodent behind his left ear stuck on the mastoid, and a probably malignant prostate.

In the evening there was a cocktail party in our honour at the University Club, where we met all our friends, and most of the staff we had not yet met, including Dr. Koontz, who had attacked me violently in the Baltimore Sun, but was very charming on acquaintance. We had supper with the Blalocks.

Friday, October 13th.

The morning had a series of interesting operations. Blalock was doing a child with a patent ductus who had had no to and-fro murmurs and only a soft systolic. The ductus was very large—12 mms. in external diameter: when it was closed the diastolic pressure rose from 30 to 40 to over 100.

Scott got a real stinker. A man with all sorts of previous biliary operations "elsewhere," and now with portal and biliary cirrhosis, bleeding from œsophageal varices, and jaundiced. After fighting through multiple adhesions, he found no trace of a bile duct, even up in the porta hepatis. He did a porto-caval shunt, and will go in next time for a Longmire (anastomosis of a central biliary duct in the left lobe to the jejunum).

Ward was removing the superficial part of the parotid for recurrent parotid tumour, and made a very nice dissection of the branches of the facial nerve, using faradic stimulation to identify them.

At 12.00 we had a three-corner argument over biliary surgery in the Hurd Hall, the subject being two cases, the participants Blalock, Ravitch and I. The main concern was the operative treatment of the acute case.

At 1.30 I did a gastrectomy on the old Italian shown by Stone yesterday. The duodenum was a badly stuck up one, and in dissecting it I got into the ulcer behind, but fortunately was able to get the correct plane beyond it, and get quite a good cuff. I am convinced (*a*) that preliminary dissection of common duct is unnecessary except in the ulcers that should not be attacked at all, (*b*) that where possible the double purse-string is a far more workmanlike method of inversion than multiple thread or silk sutures.

In the evening we had dinner at the Bahnsons, with the Ravitch's. They have in their small house a wonderful electric kitchen: refrigerator, deep freeze, dishwasher and drier, clothes washer, clothes drier, electric mixer, all in lovely white enamel.

Saturday, October 14th.

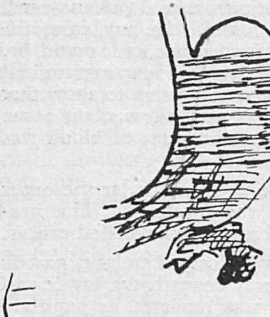
Bus to Annapolis: watched boats in the harbour, and came back about 5.00.

Sunday, October 15th.

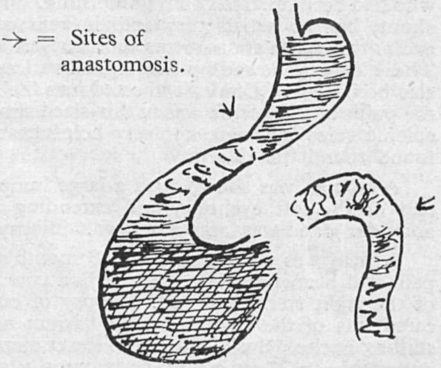
A round in the morning with Kieffer. The first case was a business man of about 60, admitted into the private block under Blalock, and remarkable as an example of minor surgery, 1950. On Friday, October 5th, he banged his right foot on a chair in New York: on Monday, 9th, the foot was hurting and he consulted a surgeon in Zurich: on Wednesday, 11th, he showed the foot to an orthopædic surgeon in Amsterdam, who X-rayed it, said there was no fracture, and applied a lotion: on Thursday, the 12th, it hurt so much that he started for home: 500 miles from Gandar the inner starboard engine cut out. 250 miles further the outer starboard engine cut out; meanwhile fog shut down over Gandar: they got on lifebelts and prepared to ditch near the shore, while two air-sea rescue planes met and accompanied them, but a rift in the cloud allowed them to make a good landing on two engines; on Saturday, the 14th, he was admitted to Johns Hopkins.

Among the cases we saw was a girl of 16 with an osteogenic sarcoma of the upper end of the right humerus. History, symptoms, signs, and X-ray were undoubted, and a forequarter amputation the only treatment.

My first Billroth I gastrectomy had never been really happy. He kept on feeling full and vomiting up green bile. He said that he could feel the food leave the stomach and accumulate beyond. We now studied a fresh barium series that showed a condition exactly as he described. The gastrectomy looked perfect, the gastro-duodenal anastomosis was hardly visible, but the barium hung-up in the third part of the duodenum, at the 5th hour distending it to an alarming globe of about 3 inches in diameter. I accepted rather readily that the hang-up was at my jejunal resection, but Nanson, the New Zealander, pointed out that the resection must be beyond the duodeno-jejunal flexure, while the hang-up was proximal to it. Looking again, we found the site of anastomosis four to six inches along from the block, recognisable but causing no deformity or delay at all. We were dealing therefore with a duodenal ileus, and, on getting out his X-rays of last March we found it there too, very poorly filled because the gastro-jejunostomy evacuated most of the stomach contents, and not exciting comment because the unsuccessful gastro-jejunostomy was clearly demonstrated and clearly accounted for his hæmorrhage.



X-ray before operation.



X-ray (6 hours) after operation

It was an unfortunate series of events that could hardly have been avoided in re-operating on a patient done "elsewhere." Gastro-jejunostomy is impermissible treatment for duodenal ileus, and we assumed it must have been done for a duodenal ulcer. Having resected the stoma, I was surprised to find a completely normal and mobile duodenum (but again, these are not unknown in gastro-jejunostomy done "elsewhere"), and for that reason did a Billroth I, which is undoubtedly a better operation than Billroth II. where the duodenum is normal. In the past I have always done Billroth II. for gastro-jejunal ulceration because the previous short circuit has always been done for an ulcer. Had I done a Billroth II. here, we should never have heard of the duodenal ileus.

The poor chap will almost certainly need a duodeno-jejunostomy now, but my recent jejunal resection will render the first loop too fixed. The only thing is to leave him two months, and do it then.

In the afternoon Mark and Mrs. Ravitch took us out, first to their home, then for a country drive, then for dinner at the Olney Inn, an old farm house providing Lucullan feasts for the epicures of Baltimore and Washington, then to a picture house to see Eye Witness, finally to ice creams at a " Drive in." Here you drive into a park, flash your lights, and a girl comes out and takes your order, anything from a drink to an elaborate dinner : in a few minutes she reappears with all the food on a tray that she hooks to the window of the car.

Monday, 16th October.

Operations. Kieffer was doing a pulmonary stenosis under Blalock's instructions ; Firor a partial thyroidectomy for nodular goitre ; Colston a nephrectomy ; and Trimble a lumbar sympathectomy. They favour a large grid iron for sympathectomy ; it gives a more direct approach than the lateral transverse, but a deeper hole, and I doubt if it does the lower intercostal nerves any good. I still prefer the other.

Later Trimble tackled a most difficult job, a shocking example of " elsewhere " surgery. The original lesion was presumably a duodenal ulcer. The pyloric antrum had been divided across, closed and left in situ, and the rest of the stomach, apparently without any further curtailment, had been finished as a full width posterior Polya, that spilled a lot of the barium right round the duodenum and back through the pylorus, and had led to an extensive jejunal ulcer that involved the transverse mesocolon.

After lunch I went to the Welch Library to see the collection of Jonathan Hutchinson's notes and drawings that had been acquired by Osler. The tremendous amount of work those old boys put in is breath-taking ; but then they had no journals to read, no committees, few societies, few letters, and a nice income without competition. It is sad to think that all these beautiful drawings and careful histories will never see the light but remain in tabulated crates in the basement.

7.30. Round with Bahnson. X-rays of a woman with portal hypertension, who had been operated on that morning. The intention was to do a lieno-renal shunt, but no satisfactory splenic vein could be found. In any case, the access through a trans-rectus incision was about as inadequate as it could be. These X-rays showed up œsophageal varices well. A splenic angeiogram had also been done. Diodrast injected into the spleen after aspiration to show that the point of the needle was in fair-sized sinus. The X-rays showed up some splenic veins but were not very helpful, and at operation a lot of blood was found round the spleen.

A woman was shown with a large lump the size of an apple, at the outer end of the left eyebrow, and extending up into the forehead. The pre-auricular gland was large and hard. Biopsy showed a squamous-celled cancer.

A man was shown with an 18 month's history of loss of weight, gastric pain and hæmetemesis. He also had two hard lumps beneath the lower end of the right sterno-mastoid. Biopsy of one lump was reported as papillary carcinoma of the thyroid. The barium meal showed a crater the size of a shilling at the pyloric end of the lesser curve, in a narrowed segment. It was impossible on X-ray to decide between ulcer and cancer, though the history favoured cancer. Two interesting points, (1) were the lumps in the neck and the lesion in the stomach connected ? (2) which should be done first ? Nanson pointed out that the lump in the neck moved on swallowing, a property which pretty well ruled out a metastasis from the abdomen. It was felt that the gastric lesion was the more urgent of the two problems.

(He had a laparotomy next day and the lesion was a chronic ulcer).

Tuesday, 17th October.

A day spent watching operations. I have now seen each of the main heart operations—for patent ductus arteriosus, for coarctation of the aorta, for pulmonary stenosis, for mitral stenosis, and for the tetralogy of Fallot—done three or four times. It seems to me, as a spectator, that they ascend in difficulty in that order. They look tedious rather than difficult, and the residents are apparently all allowed to do one or two just as we let our house surgeons so a few hernias and appendices. However, there is no room for a false step, or for re-closing a suture line. A heart operation that goes wrong is distressingly irretrievable.

At 4.30 I gave a lecture on cancer of the stomach and œsophagus, among other things condemning total gastrectomy by the infra-diaphragmatic route. We had a good discussion. Afterwards we had dinner at the Lewisons.

Television is much more in evidence in the American than the British home, and both the programmes and the definition are infinitely better than ours. Most parents fear it, as we do, as the universal de-educator of the future, killing reading, conversation, hobbies and social intercourse of every kind, and bringing up the coming generation as a race of inarticulate visual morons.

Wednesday, 18*th October*.

In the morning I did a gall bladder. The gall bladder was full of stones, the common duct dilated and containing a few, but the probe passed easily into the duodenum so that I drained the duct by a small tube passed upwards towards the liver.

It is interesting that I was brought up by Rowlands on the Kocher incision, but, without any urging and for no reason that I could give except that I thought it gave less adequate access to the ducts, I gradually abandoned it for the right paramedian. Within the last six months I have tried a few Kochers again, and I have used it for all three cases I have done in Baltimore. I am sure I shall stick to it now, except in the long abdomen. A great virtue is the ease and security with which the peritoneum is closed, compared to the shredding posterior rectus sheath in the other incision. I shall also stick to the lesson I have learned here, to remove the gall bladder from fundus down, after first dividing and ligaturing the cystic duct and cystic artery. At last I can be sure of doing a good peritoneal cuff.

At 5.00 we gave a farewell cocktail party to our Hopkins friends. The management had allowed us the use of the Welch Memorial Hall, and the Hospital caterer provided the fare, the decorations and the service—all admirable. About 70 people came, and the party was a great success. The Welch Memorial Hall is a fine room dominated at one end by Sargent's famous and remarkable portrait group of the men who made Hopkins—Welch, Osler, Halsted and Kelly. It is said that Sargent hated Halsted ; whether this be true or not, the picture would suggest a personal animus and certainly gives evidence of a discourtesy that could hardly have been accidental. Halsted is shown as an undistinguished and almost servile figure, hovering in deep shade in the background as if he was in polite attendance on the three notables in front. Where will history place him ? Certainly far above Kelly, probably as the greatest of the three, for the reputations of Welch and Osler depended very much on their personalities, and personalities fade unless they are perpetuated by a Boswell.

Richard Kieffer senior took me to dinner at the Caduceus Club, a very select club of medical men representing all branches of the profession, that dines once a month in the house of a member, usually to listen to a paper. On this occasion we had an all-round discussion and kept off politics.

Thursday, 19*th October*.

Keiffer asked me to do a thyroid and helped me with it. The patient was a coloured woman of about 30, the goitre a colloid one with an intra-thoracic extension. The operation was difficult as the intra-thoracic lump would not shell out as 19 out of 20 do, but was fixed and overlaid by veins going into the left innominate. Things went smoothly however ; Kieffer was unfamiliar with the trick of ligaturing the main trunk of the inferior thyroid artery well away from the gland which most of us practice in London.

I spent two very interesting hours with Dr. Richter in his research department. He has many interests, but two main ones ; the plotting of skin resistance as a means of measuring areas of sympathetic denervation or overactivity, and a study of endocrinology. In this last he has an invaluable ally in the rat, next to man the most intelligent of God's creatures, and more intelligent than many men. Further, the rat provides a complete study in the modifying effects of the sedentary and safe life of civilisation on endocrine function. The laboratory rats of today have been bred in captivity for 70 years, which, with two generations a year, would represent human history for 3,500 years. Their ancestors, the wild rats, can be caught today in the sewers and rubbish dumps of Baltimore, and a study of the endocinology of the two groups is the next best thing to a comparison between, say, Ghengiz Khan and Field Marshal Montgomery.

The rats are kept in standard cages. Holes in the side allow them to make their own pick between any of a dozen different solutions to drink, and holes in the floor offer them the choice of the diets in several trays. Behind, a round hole leads to an exercise drum, and a meter records the number of revolutions of the drum in either direction, so that the exercise taken by each rat in a given period is accurately charted, and its relation to sex, age, diet, health and endocrine deprivation, can be studied. A healthy male rat runs very much the same distance every day while he is healthy : a healthy female runs very much more every fourth day and slacks the other three, corresponding to a four-day ovulation cycle.

Richter has a complete work on the operative surgery of the rat, with illustrations equal to those in any surgical text book. He can remove any endocrine gland, including the parathyroids and the pituitary, anterior or posterior lobe or both together, without otherwise disturbing the health of the rat. Parathyroidectomised rats will go at once to the tube containing calcium, adrenalectomised rats will make for sodium chloride. If their chorda tympani nerves are divided, they are no longer able to make the selection.

Wild rats have very much larger adrenals than laboratory rats ; deprived of their adrenals they inevitably die, whereas laboratory rats can live after adrenalectomy if allowed all the sodium chloride they want. Under natural conditions the laboratory rat hasn't a hope. A pair escaped, and established a colony on a newly-started rubbish dump : then one night two wild rats arrived and killed four hundred of them in the night.

In the afternoon the Rienhoffs took us out to lunch at Annapolis and round the naval training establishment, going over to Gibson Island, a privately-owned holiday and sailing centre, where they have a summer home. In the evening we dined with Trimble and his wife, a gynæcologist from Sidney whom he met while consulting surgeon to the Navy in the Pacific.

Friday, 20th October.

I started the morning by doing a thread lattice repair of a direct hernia. I am quite sure by now that linen thread is a good deal stronger and less irritating to the tissues than silk of the same diameter, and I have convinced one Halsted disciple, at any rate, that such is the case.

At 12.00 I took the Clinic in the Hurd Hall. There were two cases, both excellent. The first was a man of 40, who had mild indigestion for a year or two for which he had taken " Tums " (a proprietorv alkaline tablet). Twenty four hours before he had been taken with a sudden bad pain in the epigastrium, severe but not enough to stop him working. He carried on for two hours and then had to give up and go home. After a bit he came up to hospital, where he was examined but no physical signs of note were discovered, and he was given some medicine and sent home. Next morning when he came up he was found to have a temperature of just over 100, a leucocytosis of 13,000, tenderness in the right iliac fossa, and tenderness per rectum. He was admitted with a provisional diagnosis of appendicitis.

The student who examined him picked the salient points at once. He looked well, calm and a good colour. He was not in obvious pain. His pulse was about 80. His abdomen when uncovered was seen not to move at all ; it was uniformly resistant to palpation, but he complained of very little tenderness, a little more in the right iliac fossa than elsewhere, but that not localised. Auscultation revealed peristaltic sounds everywhere, but feeble and very infrequent. X-ray showed a heart considerably enlarged, no air under the diaphragm, the only point for comment being that the first loop of jejunum contained a lot of air.

There was plenty to discuss. The previous history suggested a duodenal ulcer, and pointed to a diagnosis of perforation, but the first pain was not nearly dramatic enough. The enlarged heart suggested cardiovascular disease : a coronary attack was pretty well excluded by the age, the good colour, the regular pulse, the diminishing peristalsis and the rectal tenderness, but a mesenteric thrombosis was still on the cards, though unlikely because his general condition was so good 24 hours after the event. Appendicitis is statistically the most likely abdominal emergency, but there were so many things against it that it could be pretty well excluded. The first pain was too sudden, too severe, too high, and too well localised ; since then the pain had got better and more diffuse rather than worse and more localised. Again, a general peritonitis (which he clearly had) had it been due to the bursting of an infected appendix would be accompanied by a rising pulse, a toxic appearance and abdominal silence. We were left with the diagnosis of a diffuse chemical peritonitis, as yet uninfected, the most probable cause being limited leakage from a small duodenal ulcer.

The second case was a young coloured girl, remarkably beautiful because she was thin and barely negroid in face or colour. She had been losing weight rapidly for a year. During the first half of the time she had suffered from vague abdominal discomfort but latterly she had had diarrhœa to the extent of 6 or 8 motions a day. There was no tuberculous history or environment. The bacillus had not been found in gastric washings or urine. Her abdomen was flat, with a doughy resistance in the right iliac fossa, but no definable lump. Barium enema showed a filling defect in the caput cæci, and barium flowing into the lower ilium, which seemed narrowed. A barium meal had not yet been done. After dismissing ulcerative colitis, we were left with ileocæcal tuberculosis and Crohn's disease, with odds on the former since the steady progress downhill and the involvement of the cæcum were both against regional ileitis.

At the end of the round Dr. Crosby, in a graceful little speech, presented me with the certificate of appointment as Visiting Professor. As I had not known this was coming I was a bit nonplussed, but very gratified by the genuinely hearty reception of the announcement by the students.

At 1.30, with Bahnson, I operated on the man with the peritonitis. I made an upper midline incision. On opening the peritoneum we came on free bile, with no lymph. Pulling out the stomach and putting in retractors to look at the duodenum we had to suck out a lot more bile. Then we found that the duodenum was unscarred and unperforated, but bile was effused retroperitoneally above it into the lesser omentum and below it round the hepatic flexure and right half of the transverse colon, which had the appearance of lying in a cellophane envelope distended with bile. The gall bladder contained lots of stones but was undistended and uninflamed. We looked into the lesser sac, which was empty, and felt the pancreas, which was normal. We then mobilised the duodenum and looked behind it and found lots of extraperitoneal bile, but no hole in the duodenum or bile duct. We then returned to the common bile duct, which was grossly distended. After isolating the cystic duct and putting a tape round it, we opened the common duct ; out came lots of dark bile and three round stones. We washed out with saline and got no more stones. We then got a probe, after so much delay and difficulty that we feared a false passage, into the duodenum. We opened the duodenum and hooked up the point of the probe. At first the false passage idea seemed supported by the discovery of an easily-visible and palpable papilla an inch above and medial to the point of emergence of the probe. However, the probe was clearly not emerging through a tear, and we concluded that the second papilla belonged to the duct of Santorini, or possibly an aberrant duct of Wirsung. We therefore cut down on the probe to make the opening patulous, pulled down the lower limb of a T-tube into the duodenum, closed the incision in the duct round the T-tube, removed the gall bladder, and closed the abdomen, bringing the T-tube and a soft rubber drain out through a separate stab.

The whole story is exceptional : sudden blockage of the common bile duct without jaundice in a patient with no previous gall stone history, and leakage of bile in quantities from the retro-duodenal portion of the common bile duct without a macroscopic tear. The leak probably allowed the pain to subside, and postponed the appearance of jaundice.

I finished up a busy day by going to a combined medical and surgical discussion on a group of chest cases and films at 3.30, and at 5.00 to a surgical round in the Surgical Library run by the surgical residents for the benefit of their medical colleagues. The idea is fine. A month ago the surgical residents felt they were getting rusty on medicine and asked the medicals to show them a group of cases; this was a return visit.

In the evening we were entertained to a sumptuous feast at the house of Bill Rienhoff, who is as staunch a Guy's patriot as anyone in the Borough.

Saturday, 21st October.

At 9.00 I attended a round by Firor on the man who had a thyroid carcinoma and a large gastric ulcer. He ignored the thyroid and talked sound common sense on gastric ulcers, gastric hæmorrhage, and malignant transformation of ulcer, on which subject he shares my view that the incidence is about 1 per cent.

In the afternoon William Scott took us a for drive through lovely wooded country in autumn colours nearly as far as York, and took us to dinner at his house in the evening.

Sunday, 22nd October.

By train to Boston, leaving Baltimore 10.41. Dick and Margery Kieffer drove us to the station. We said goodbye to Hopkins with great regret. All along, south and north of New York, we were close to the sea and cut across innumerable inlets crowded with yachts. The opportunities for the sailor in the United States must be ten times those available in England, indeed in Chesapeake Bay alone there are probably more sheltered harbours than in the whole of Britain. In these inlets the rise and fall of tides seems small and gales exceptional, so that the boats lie side by side against landing stages. In addition there is the inland sailing provided by all the great lakes.

We went to the Puritan Hotel on Commonwealth Avenue, which is as comfortable and friendly as I remembered it on my first visit in 1937.

(To be continued)

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Reviews

The Principles of Pathology. By R. A. Willis. Butterworth. *Price* 50*s*.

The avowed intention of this book, as set out in the preface, is to deal with the whole subject of pathology " without artificial subdivision into general and special parts." Now, in the days of Astley Cooper and Bright, anatomy and physiology were taught by the clinicians while the student was walking the wards. Such a procedure is no longer practicable and we separate the preclinical and clinical subjects, although still attempting to illustrate the one with the other. To draw a parallel, in 1889 Sir Samuel Wilks could publish his Lectures on Pathological Anatomy as a series of chapters on clinical entities, with only a brief attempt to correlate the processes occurring in the different organs. We must now recognise that a division into the general aspect dealing with the alterations in the basic anatomical structures and physiological mechanisms, and the special aspect, which represents the unique effect of such general changes on individual organs, or persons, is neither artificial nor repetitive but on the contrary, necessary and practical, provided that the one is firmly linked with normal anatomy and physiology, and the other with clinical medicine. It is the failure to form these latter links that has confused pathology in recent years.

This book is written in persuasive style, but the author's apparent determination to mention every disease leads to a scrappy appearance. Some chapters, for example that on fungi, consists almost entirely of short paragraphs more suited to a synopsis than to a text-book. A lack of proportion is also apparent in the illustrations. An X-ray of calcified tubercles in the spleen, and some of the five pictures of hydatid disease could profitably be replaced with good photomicrographs of commoner conditions.

In the first half of the book there are some doubtful statements, for example, that all full antigens are proteins. It is also disappointing to find that no clear distinction is made between primary and secondary tuberculosis, in spite of a long section on allergy in this disease. It is also surprising at the end of this section to discover that a general discussion on allergy only occurs some ten chapters later. The disadvantages inherent in the general scheme, together with minor imperfections, some of which have been mentioned, may well render the book muddling to the beginner although he should profit from the appendices and the section on tumours. J.O.L.

A Synopsis of Fevers and their Management. Published by Virol. *Price* 2*s*. 6*d*.

This book by an anonymous author is written to advertise the merits of Virol in the diet of patients suffering from fevers. The notes on the various diseases are well written, but have no advantages over the accounts to be found in any text book of medicine ; and there is no adequate account of the use of the new antibiotics. R.E.I.

A Synopsis of Anæsthesia. By J. Alfred Lee. 2nd Edition, 1950. Wright. *Price* 15*s*.

The second edition of this book, although called a synopsis, contains more information than many textbooks on anæsthesia. Certain chapters have been rewritten and others added, thus bringing it completely up to date. The chapter on muscle relaxants now includes all the drugs that have been commonly used to produce muscular paralysis. The methods of obtaining certain nerve blocks have been added to the chapter on Regional Anæsthesia, which is one of the most useful in the book. A chapter on the Anæsthetic Out-Patient Clinic has been included and also an appendix of useful information, which might with advantage be expanded. Among the new illustrations there is a chart of the signs of anæsthesia, which shows the swallowing and vomiting reflexes in the wrong order. Apart from this one small point the book maintains the very high standard set by its predecessor and will continue to be of great value not only to the candidate studying for the 2nd part of the D.A. examination, but also to the occasional and specialist anæsthetist. D.M.C.

Infant Feeding and Feeding Difficulties. By PHILIP EVANS and RONALD MACKEITH. Churchill. *Price* 12*s.* 6*d.*

This book will be a source of interest and profit to all those concerned in the feeding of infants (" infant feeding " is not grammar, unless it be taken in the same sense as, say, " cow grazing." " Feeding difficulties " is not a possible conception at all). There has, in fact, been so gradual a change in this branch of medicine that what Cameron taught the student thirty years ago is substantially as true now as it was then ; yet there have been enough modifications by this time to justify a fresh review of the whole subject, and here it is from the hands of Dr. Evans and Dr. MacKeith. They have covered the field in a satisfactory way, the style is simple, clear and unobtrusive, with few blemishes, the advice is practical and the judgement sound. The size of the book is handy, the print good, the illustrations excellent, and there are enough tables, graphs and figures to satisfy the prevailing taste. (I prefer the quotations myself, though the one from *Gammer Gurton's Needle* will have to be put right in the next edition). The same taste, a bad one, demands that the authors should suppress their personalities, and perhaps it is inevitable that they should do so ; but the fact may be regretted a little by those who know them. H.St.H.V.

A Handbook on Diseases of Children. By BRUCE WILLIAMSON. 6th Edition. Livingstone. *Price* 17*s.* 6*d.*

This book was first published in 1933. Superficially it would seem well suited to the needs of the medical student—small, well planned and well produced. The subject matter is confined to essentially pædiatric disorders, and the right emphasis is given to the common diseases.

The book has two failings : the descriptive style is diffuse, and the subject approach often loses touch with modern scientific principles. It can only be recommended with reserve for undergraduate reading. The formulary gives very useful prescriptions, and includes a summary of all the antibiotics.

D.W.B.

Textbook of Orthopædic Medicine. Volume II. Treatment by Manipulation and Deep Massage. By JAMES CYRIAX. Cassell. *Price* 18*s.* 6*d.*

In this volume the author describes and illustrates the treatment of deep-seated lesions by deep massage and manipulations. The text is clear and concise, and the illustrations are excellent. The book should prove of value chiefly to the qualified physiotherapist, but the medical practitioner interested in manipulative technique should find it useful. Your viewer does not agree, however, that the contents of this volume can be justifiably described as " Orthopædic Medicine." J.L.B.

Experimental Physiology for Medical Students. By D. T. HARRIS, H. P. GILDING and W. A. M. SMART. 5th Edition. Churchill. *Price* 21*s.*

This admirable book is of value to student and teacher alike. It contains details of far more experiments than can be performed in the course of practical physiology for medical students. As only brief interpretations of the results are given the value of experiments as a stimulus to thought is not lost. A number of simple electronic circuits for commonly used physiological instruments are given. J.N.H.

The Sulphonamides. By F. HAWKING and J. S. LAWRENCE. Lewis. *Price* 42*s.*

With over 300 pages devoted to the Sulphonamides in all their aspects this book is obviously a work of reference. As such it has two faults. Firstly, some of the facts are difficult to unearth—for example, an enquirer would take a long time to find out whether Salmonella organisms show any degree of sensitivity to sulphonamides. Secondly, where so much of the text is a précis of the vast amount of literature mentioned in the bibliography—there are more than 1,200 references—it would be more interesting and of greater value if these accounts were more critical in their outlook. Apart from these objections the book achieves its aim which is to give a comprehensive account of this small branch of therapeutics. T.M.L.P.

X-Rays in Dental Practice. By G. H. HEPPLE. Philips Electrical. *Price* 25*s.*

This book is rather expensive for the information it has to give. It is well printed on good paper but a large proportion of the many illustrations do little more than catalogue Philips' apparatus. Space is used to give rather useless lists of dental conditions and to discuss at length simple things like the convex pip on the corner of the intra-oral films.

Positioning for intra-oral radiographs is well demonstrated but not so well for extra-orals. The X-ray reproductions are mostly good, though the temporo-mandibular joint projection given convincingly fails to show the joint. It shows the ramus and condyle only. No exposures are given.

The design of a darkroom is quite well discussed and several useful points are made. Preparation of the solutions and processing, a list of Philips' accessories, and some useful hints complete the volume. F.L.I.

A Synopsis of Surgical Anatomy. By A. LEE MCGREGOR. John Wright. *Price* 25*s.*

This, the 7th edition of a well-known book, contains a fund of information very useful to those preparing for qualifying and higher examinations. It has been extended to include recent surgical advances, including thoracic, vascular, and sympathetic surgery.

There are two main sections, the anatomy of the normal and that of the abnormal, an arrangement which does not appear to offer any great advantage over a simple regional one. Illustrations are clear, but in a few instances appear over-simplified.

To some extent, an eponymous nomenclature is retained, serving as a reminder of great names of the past, and the book is recommended to senior students. P.G.L.

Sport

RUGBY

Guy's *v.* Gloucester

Result—Lost 8—25

10th March, 1951

In spite of the heavy condition of the ground and the rain that fell during play, the game was surprisingly open and fast.

Guy's were not at full strength and the pack was consequently losing most of the set and loose scrums, which placed upon the backs the extremely tiring and thankless task of continuous defensive play.

In such a situation it was not long before Gloucester scored their first try from an orthodox passing movement starting at a set scrum inside the Guy's 25.

It wasn't long before they scored quite a few !

Between tries from a high drop out, Middle dashed through and gathered the ball at full speed, leaving very little opposition between himself and the Gloucester line. Wilson was at hand to take a pass and with a surprising turn of speed scored in the corner.

Half time, Gloucester 16, Guy's 3.

Much the same sort of game in the second half saw many attacks by Gloucester and defensive work by Guy's with the inevitable result. However, a brilliant break through by Thomas in the centre and a pass to the ever-present Wilson sent that man over for a try near the corner flag. Darn converted with a good kick.

Final score, Gloucester 25, Guy's 8.

GOLF

Guy's *v.* Chelsea Polytechnic

An enjoyable match was played against Chelsea Polytechnic to open the Hospitals' Golfing Season.

The match was at Royal Blackheath Golf Club, and Guy's won by 4 matches to 2.

Results : Guy's names first.
I. Caldwell lost to R. Carter 1 hole.
M. H. H. Bishop beat D. Carter 2 and 1.
D. Croll beat R. Bell 8 and 7.
M. C. Gill-Carey beat R. Douglas 6 and 4.
P. M. Rusden beat A. Tanter 9 and 7.
D. Cliffe lost to J. Weatherill 1 hole.

HOCKEY

The Folkestone Easter Hockey Festival

Results—

Guy's *v.* Folkestone Optimists—Won 4—2.

Guy's *v.* St. John's College, Cambridge. Won 2—0.

Once again Guy's were invited to play in the Folkestone Easter Hockey Festival. Socially the function was as good as ever but the weather played havoc with the pitches and Guy's played only two of the five arranged games. Our success in these two games was in no small part due to our reserves, all four of whom played so well as to make the absence of the first team players hardly noticeable. We hope that these reserves will carry the spirit of the festival into future years and make it a perpetual feature of Guy's sport.

Team : C. Bishop ; G. H. Danford, O. Eggington ; C. F. M. Robinson, E. A. Murray (Capt), H. Prentice ; G. L. Lyne, J. Hall, H. C. F. Meyer, C. H. Opie, R. Hodson, S. S. R. Earl.

Hospital Information, etc.

APPOINTMENTS VACANT

Applications are invited from registered Dental Practitioners for the following appointments to commence duties on 1st October, 1951 :—

1 **Dental Officer to Salomons Centre**—1 session per week.

1 **Dental Anæsthetist to Salomons Centre**—1 session per week.

3 **Orthodontic Assistants**—3 sessions per week.

1 **Dental Officer to Nursing Staff**—3 sessions per week.

The posts will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, S.E.1, to whom applications should be sent not later than **Saturday, May 5th, 1951.**

GUY'S HOSPITAL DENTAL DEPARTMENT

Applications are invited from registered Dental Practitioners for the following appointments to commence duties on 1st October, 1951 :

Department of Conservative Dental Surgery.

5 Registrars to attend for 6 sessions each per week
5 ,, ,, ,, ,, 3 ,, ,, ,, ,,
3 ,, ,, ,, ,, 2 ,, ,, ,, ,,
1 Administrative Dental Officer to attend for 6 sessions per week.
1 Full-time Assistant to the Visiting Dental Surgeons.

Department of Preventive Dentistry.

2 Registrars to attend for 6 sessions each per week

Extractions and Minor Oral Surgery.

1 Registrar to attend for 6 sessions per week.

Casualty Department.

1 Registrar to attend for 5 sessions per week.
1 Registrar to attend for 6 sessions per week.

Department of Mechanics and Prosthetics.

2 Registrars to attend for 6 sessions each per week
2 ,, ,, ,, ,, 3 ,, ,, ,, ,,
2 ,, ,, ,, ,, 2 ,, ,, ,, ,,

Dental Department for Children

1 Registrar to attend for 6 sessions per week.
2 Registrars to attend for 3 sessions each per week

---

1 Assistant Clinical Pathologist (Dental) to to attend for 3 sessions per week.

The posts will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service. Forms of application are obtainable from the Dean, Guy's Hospital Dental School, London, S.E.1, to whom applications should be sent not later than **Saturday, 5th May, 1951.**

Applications are also invited for the appointment of Half-time **Demonstrator in Special Anatomy and Histology** and forms of application should be submitted to the Dean not later than **Saturday, 5th May, 1951.**

APPOINTMENTS VACANT

Applications are invited for the post of **Resident Anæsthetist,** duties to commence on May 12th, 1951.

Applicants must have held twelve months' House Appointments. Salary at the rate of £450 per annum, less £100 for board and lodging. The post will be tenable for six months in the first instance. Applications should be lodged with the Superintendent, Guy's Hospital, London Bridge, S.E.1, on or before **April 28th, 1951.**

APPOINTMENT

H. A. Ripman, F.R.C.S., M.R.C.O.G., Consultant Gynæcologist and Obstetrician (part-time), St. Alfege's Hospital, Greenwich, S.E.10.

PUPILS' PHYSICAL SOCIETY

The next meeting of the Society will be held on Tuesday, April 10th, at 8 p.m., in the Anatomy Theatre, when Mr. Philip Mitchiner will deliver the Annual Address.

CHANGES OF ADDRESS

Miss T. Dartnall, Edith Cavell Residence, Toronto Western Hospital, Toronto, Ontario, Canada.

W. G. Carnegie Dickson, L.D.S., R.C.S., 4, Edgar Buildings, Bath, Somerset. Tel. : Bath 2426.

R. Glanvill, M.R.C.S., L.R.C.P., 7, Pratton Avenue, Lancing, Sussex. Tel. : Lancing 3426.

John W. McLean, L.D.S., R.C.S., 15, Sputh Street, Park Lane, W.1. Tel. : GROsvenor 1912.

P. J. Watkin, O.B.E., M.C., M.R.C.S., L.R.C.P., 26, Beverley Avenue, Coombe Lane, S.W.20. Tel. : Wimbledon 7630.

John G. Whitelegg, B.D.S.Lond., L.D.S., R.C.S.Eng., Market Hill, Clare, Suffolk.

BIRTHS

EPPS.—On March 6th, 1951, at Nuffield House, to Jo (née Rogers), wife of Philip George Epps, F.R.C.S., White House, Bredgar, Kent—a son.

MACLEOD.—On March 27th, 1951, at Nuffield House, to Joan (née Lewis), wife of Dr. Ian S. MacLeod, of Forest Hill—a daughter (Fiona).

STEINER.—On March 30th, 1951, (his brother's birthday), at Exmouth Nursing Home, to Doreen (née Beattie) and Walter Steiner, B.D.S.—a son (Timothy Alexander).

WHITELEGG.—On March 9th, 1951, at The West Suffolk General Hospital, Bury St. Edmunds, to Janice, wife of John G. Whitelegg, B.D.S.—a daughter.

DEATHS

ALBERS.—On March 24th, 1951, Alfred Gustave Albers, B.A., B.M., B.Ch., F.R.C.S., of Newlands, Cape Town, South Africa—the result of an accident.

McBRIDE.—On January 3rd, 1951, John McBride, L.D.S., R.C.S., of 1, Chlorine Gardens, Belfast.

EDS. {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

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PASSIM

FOR those who saw the Residents' Play, 1950, mention of occupational therapy may well conjure up the memory of that colourfully-attired, chocolate-skinned and dynamically-mannered character who complained, in tuneful Southern wail, of the tedium of the long and uneventful night. For others, perhaps more realistic and sober, there is the recollection of those generally unobtrusive young women, in becoming linen frocks of subdued tint, to be seen from time to time offering subtle persuasion and advice to an intent patient in bed grappling with a hand-loom on the covers.

What, after all, is this occupational therapy? Our attention has recently been drawn to this subject by a new and impressive tome so entitled which, unhappily, proves more confusing than it is informative. For that reason we enquired nearer at home or, to be precise, in the basement of the York Clinic. There a unit is located in embarrassingly cramped surroundings. Two qualified workers are in charge, for even in this branch of organised activity the most terrifying and ambitious courses have been devised for those who aspire to be recognised in this field. Indeed, in the Guy's unit, the majority of the personnel are still in the process of training. The diverse realms of human endeavour in which these quiet and seemingly demure young ladies are prepared to assist others are veritably bewildering in their scope and complexity, from weaving to languages, from lapidary to stenography.

The patient in bed, once over the acute stage of an illness, may well become as lethargic in mind as he is indolent in body. Desirable as a period of rest may appear in the first instance, its unnecessary prolongation leads inevitably to inertia. Today, more than ever, people must learn to look after themselves. Merely to provide those in bed with a little light literature of the type that one so commonly sees cluttering up the bed-tables and being swept away in the " tidy " is tantamount to prescribing soporifics for the mind as dangerous and addictive as the opiates with which we are more acquainted.

Patients, accordingly, would gain much from their own exertions, so long as these were judiciously planned and carefully guided. In the more specialised field of exercises for weakened limbs and muscles, better that their efforts should be productively employed than dissipated in uncreative manœuvres. " In the sweat of thy face shalt thou eat bread " may not be a principle of universal application to the convalescent. Yet to have achieved something tangible and worthwhile by the end of the day is surely better than to have whiled it away in parlour games or " jest sittin'."

The occupational therapists are there to help. Their resources are at present physically limited but worthy of every encouragement. Unfortunately the fact that their assistance can be invoked only by the prior endorsement of the Superintendent himself upon the bed-letter request has led at least one houseman closely to identify occupational therapy with prescriptions for alcoholic liquor and notifications of ward-to-ward transfer. This association, we are assured, is nevertheless purely fortuitous. More power then, to the occupation and success, as we hope, to the therapy that accrues therefrom.

The Rite of Breast-Feeding

By H. St. H. VERTUE.

I.

> And who feels discord now or sorrow ?
> Love is the universe today—
> These are the slaves of dim tomorrow,
> Darkening Life's labyrinthine way.
> *Shelley.*

THE utility of breast-feeding is well known. Benefits familiar to every one are the low mortality, the relative immunity from infection, the usually benign course of an infection when it does occur, especially of gastro-enteric infection, the imperturbability of the alimentary tract in the face of the many ills of childhood and the virtual impossibility of damaging the infant by overfeeding him at the breast. To a vulgar taste mere size is more desirable than good proportions, and so to achieve the succulence suitable to an ogre's palate bottles of dried milk are the best means to employ ; but to a cultivated taste the superior beauty of the breast-fed child appeals. It is not so well known that a breast-fed child suffers less than a bottle-fed from the so-called " neuroses " (*νεύρωσις*, a straining at the sinews), but at the Salomons Centre this fact was well established by the Rogersons. Then there is the wholesome delight in the practice that the mothers themselves are presumed to feel. One of them, whose motherhood would be acclaimed by every wise man that beheld it—

> From fairest creatures we desire increase,
> That thereby beauty's rose might never die—

thus briefly declared herself, " Breast-feeding is an experience that no woman ought to miss." Just so ! But the fact is that not only have the considerations of advantage that I have mentioned ceased to carry much weight, but the pleasure itself seems also to be vanishing. Here is the remarkable phenomenon of a natural instinct failing in its force and of a normal habit falling into disuse.

When a little pig is born, he shakes himself free of his caul as soon as he has emerged from the vulva, staggers to his feet, trots round his mother's hind legs and there and then helps himself from one of her numerous teats. Very different is the behaviour of the human infant, who is so completely helpless that he would quickly die if there had not been implanted in his mother's breast a wish to take him up and feed him. Samuel Rogers, that very adroit performer on the lyre, thus delightfully describes the scene.

> The hour arrives, the moment wished and feared ;
> The child is born, by many a pang endeared.
> And now the mother's ear has caught his cry ;
> Oh grant the cherub to her asking eye !
> He comes . . . she clasps him. To her bosom pressed,
> He drinks the balm of life and drops to rest.

The fact that human life has not died out long ago proves that there must reside in womankind both the desire and the ability to feed their offspring. How much the fulfilment of this function meant to them in days of old any one may tell who has a little knowledge of literature. For example, when Creusa in Euripides' play the *Ion* is told by the orécle that she will never hold a child in her arms not " fit him to her breast " (*προσάρμοσαι τῷ μάστῳ*), she wishes that she might die. To her friends she cries that her grief is more than life can bear,

> *ἔλαβον, ἔπαθον ἄχος ἄβιον ὦ φίλαι.*

The piercing pang has smitten her through the heart (lungs, literally),

> *διανταῖος ἔτυπεν ὀδύνα με πνευμόνων τῶνδ' ἔσω.*

The intensity of the feeling is shown by the choice of metre, the dochmiac or halting. Such feeling is biologically correct: what has become of it now? In our highly civilized country today very many women do not feed their children, yet not the faintest distress is suffered by them in consequence. It is true that if there were no cows to take their place, they would persevere rather than see their children die, but that does not alter the fact that either the inclination to feed or the ability must in their case actually have been extinguished. We are certainly living in a very strange time, and the partial obliteration of this natural and normally necessary instinct is one of its strangest phenomena.

The mothers themselves cannot help you, when you try to understand the reasons for their failure. Just recently I noted that out of forty children brought before me consecutively eighteen had been fed from the bottle, a much higher number than usual. When I questioned the mothers concerned, there were two who assured me that they had been told not to feed the child by the "tuberculosis officer," and another who explained that her baby, weighing at birth only four pounds, was too feeble ever to suck the breast; but the fifteen remaining could only offer such statements as, "It just went," "It never came in: I don't know why," "He never sucked well," "I worried over him," "I never fed my last," or, more imaginatively, "The kitchen chimney caught fire and drove my milk away." Such answers, although they appear to disclose an unreflecting ignorance, are in fact both honest and illuminating. Through them we reach an important position, namely that, since the mothers are not conscious of the reason why they do not feed their children, the reason itself must lie below the level of their consciousness. Again, since science, the only clear and reliable voice now speaking, has said so little on the subject, the age is not itself conscious of the reason. Of the arts we can expect nothing at present, for they tell us mainly of the bewilderment of the artist. Our best plan is to assume the rather meagre contributions of science on this matter, as things generally known, and then to look for the truth where it lies, in the unconscious.

It was reported of Sir Alfred Fripp that once he stood up in the witness-box and boldly declared that he was qualified to practice psycho-analysis. So indeed he was, although he never did practise it: nor, as a matter of fact, do I. There is another method. Psychology was learnt from the study of unhealthy states of mind and is in consequence rather pessimistic, although, as one must be careful to add, without such study psychology would never have been brought from academic obscurity into light. But there is a power that exalts, not depresses, exhilarates, not fatigues; and this is poetry. Psychology can be learnt more easily and infinitely more agreeably from the mind of the poet, and on the present subject the poets are a mine of information. Accordingly it is to them that I turn, but without faltering in my admiration of the psychologist, a man who shoulders a heavy burden. We shall learn from the poets how a particular feeling about women once existed that had a great importance, and how large a part in the affections was played by the breast. We shall learn how the decline in the use of the breast rests upon the partial loss of this feeling. We shall journey through times that are long past, distant lands and scenes very different from any that we now know. The path will not be straight, for if it were, many would have trodden it. It will be devious: but it will not be dull.

As I write these lines there has come that time towards the end of March when the winds die down, the clouds disappear and the sun that shines through the mild, still air, is no longer the pale candle of wintry days but is revealed again as the glorious orb of warmth and brightness that gives life to the world and gladness to the hearts of mortal beings. The earth is fair and fresh as a young maiden; morning and evening the joyous groves ring with the songs of birds, and one by one the most beloved plants break into bloom. This blessed season is the time to enter the *Hesperides*, a world where it is always spring, a world of wall-flowers, daffodils, primroses and forget-me-nots, where every flower is a girl and every girl a flower and all women are kind and consenting.

O Jupiter, should I speak ill
Of womankind, first die I will;
Since that I know, 'mong all the rest
Of creatures, woman is the best.

To the author of these verses, the Reverend Robert Herrick, every part of a woman is beautiful.

> How rich and pleasing thou, my Julia, art
> In each thy dainty and peculiar part !

The meadows are fair because maids dance in them, and kiss and gather cowslips. Which way she goes is known by the sweet smell,

> Like to a field of beans when newly blown,
> Or like a meadow being lately mown.

" Love Perfumes All Parts " is the title of one of his pieces. He sings to

> a girl that keeps the neat,
> With breath more sweet than violet.

He is kindled into such felicitous blends of rapture and delicacy as

> the warm, soft side
> Of the resigning yet resisting bride.

He begs Julia to display her breasts, which are of " circummortal purity," and strings together pretty fancies about her nipples.

> Have ye beheld the pretty beam
> A strawberry shows half drowned in cream ?

When she unlaces her bodice, the air is

> Sweet as the vestry of the oracles.

Even her trifles inspire him, her carcanet, her pomander bracelet, or the black ribbon about her wrist. He wastes no time in complaints about woman's unkindness. Claiming a kiss from the bride as his due, the cheerful parson presents her to the world in his unmatched verses just as he believes her to be, a creature of perfection. There are old roses, say, if you like, the Maiden's Blush, which send their roots creeping underground to form new bushes. The roots of the poet's enchanting idealism now claim our attention, and they are to be traced back to infancy.

> The baby new to earth and sky,
> What time his tender palm is prest
> Against the circle of the breast,
> Has never said that this is I :
>
> But as he grows he gathers much,
> And learns the use of " I " and " me,"
> And finds " I am not what I see,
> And other than the things I touch."
>
> So rounds he to a separate mind
> From whence clear memory may begin,
> As thro' the frame that binds him in
> His isolation grows defined.

At first the infant lies in a world in which he has no consciousness of separate existence ; but presently his primitive egoism gives way to an awareness of objects about him, of his parents in particular. At the beginning they seem to him persons all good and all powerful, who provide him with warmth, food and shelter, comfort of body and ease of mind ; but a time must come when he is sensible of their shortcomings or when their treatment of him clashes with his egotism ; and then he begins to see them differently, as fallible beings. There are now four principle images in the child's mind, two derived from external realities, his actual perception of his father and mother, and two derived from his early and incorrect impressions of them, which have a real existence only in his mind. It is the two latter phantasmata that are of importance for our purpose. There are to be found in them four qualities, love, power, sex and death. Love and power are fruits of the child's first recollection of his parents, sex is an inborn pattern of the mind, into which they fit, and death, another pattern, is attributed by the primitive mind of the child to beings so immensely greater than himself. The psycho-analysts offer other, complicated explanations for the attribution of death, but it is not necessary to go into them here. Upon these phantasmata depend the conceptions of goddess and of god, and upon these again the subsequent growth of poetry and religion. The quality of these phantasmata must be of very great importance, for the characteristics that belong to them must be rightly mingled that a healthy development of both may take place. Much will depend upon the natural character of the child, much upon the attitude that the parents themselves adopt. Regarded as dynamic, poetry is an energy inspired principally by love and is derived mainly from the mother; religion, with a greater share of fear, is founded more upon the father. Poetry is constituted of love tinctured with awe, and religion of veneration mingled with love.

When the adult sexuality develops, the images are more intensely perceived. At this time some of the gramarye of the goddess may be transferred to an earthly maiden, "et notho cum lumine fertur," she is borne with a borrowed light. In his exquisite *Rosamund Gray* Lamb thus delicately touches the sentiment. "There is a *mysterious character*, heightened indeed by fancy and passion, but not without foundation in reality and observation, which true lovers have ever imputed to the object of their affections—something *angelic, perfect, exceeding nature*." Our name for this is falling in love. Then, too, the goddess kindles the poetic spark into flame. "Calet inventus," but "virgines tepebunt." It is only Sappho who is first-rate among the poetesses: but then her passion was for the "island girls," as Horace calls them. Conversely, male homosexuals (not bisexuals) do not attain to the front rank, for they lack the full ardour. For example, men have often wondered at the low place accorded to the poets by Plato; but there is no mystery, for he was a man without interest in the opposite sex. Poetry springs from the goddess and without her it cannot come into the mind, try the would-be poet never so hard.

In her earliest form she is the goddess of love and death, of wild animals and growing things, of woods and streams, who is enthroned in the moon. So Keats knew her (*Endymion III*, 40–71). The sublimest hymn in her honour is by Shelley, the one beginning "Life of Life! thy lips in kindle with their love the breath between them" (*Prometheus Unbound*, *II*, V, 48–71). To Rossetti,

> This is that Lady Beauty, in whose praise
> Thy voice and hand shake still—long known to thee
> By flying hair and fluttering hem—the beat
> Following her daily of thy heart and feet,
> How passionately and irretrievably,
> In what fond flight, how many ways and days.

She has many disguises. She is Sappho's apple on the topmost bough, which the gatherers could not reach; she is Marlowe's beauty that lurks at the last, when all the pens that ever poets held have fed the feeling of their masters' thoughts; and to Wordsworth and to some later poets she is simply Nature. Perhaps she has been lost by those that write the verses today: at least I have not chanced to come upon her in their works. Yet she endures, for her true home is in the mind of man, and there she abides, primal and indestructible.

Herrick, the poet who served to introduce us to this divine image of the mother, does not deliberately describe her or address her; yet her presence in his work is easily descried. She is to be seen in the bountiful spring that for ever scatters flowers over the earth, in the delight that he has in festivals of Nature, such as Christmas and Twelfth Night, the harvest-home and the hock-cart, or going a-Maying with Corinna; again in the enrichment of his work with the mythology of Greece and Rome—

> The passive air such odour then assumed
> As when to Jove great Juno goes perfumed—

and lastly in his pronounced idealism of women. He very successfully projected the Divinæ Matris Imago on to the real women about him: it is only a little comical to note that he did not subject the process to the searching test of matrimony!

Idealism of women is common ground among the poets, nearly all of whom have a share in it. The apparent exceptions are generally orators, Juvenal for instance; but to the true poets woman is of immense significance. The part she has to play is undertaken with complaisance and sustained with success. It is true that there are silly women and that there are bad women, yet between the thing of flesh and blood and the phantasma there must be at least a plausible resemblance.

Turning now to consider the form of her phantasma, one may ask what it would be that would distinguish its shape from the father's. There would be an absence of something :

> vacua et plana omnia dicas
> infra ventriculo et tenui distantia rima.

But the imagination would seize still more upon an additional feature, " the female breast, round and comely," as Jacobson (I have been told) would call it, sounding the last word as if it rhymed with homely ; for it is a striking adornment in itself and a structure that means much in the life of the little child. That early shape may seem to fade in the glare of reality, yet it is still in the mind, discerned, it may be, in later life,

> More dimly than a day-appearing dream,
> The ghost of a forgotten form of sleep.

The vision of that supreme singer Shelley, who wrote these two lines, is enshrined in the verse,

> And the rose like a nymph to the bath addressed,
> Which unveiled the depth of her glowing breast,
> Till, fold after fold, to the fainting air
> The soul of her beauty and love lay bare.

Writing such as Shelley's is quite out of character with the time in which we live ; but therein lies an addition to its value. Were we to limit our view to contemporary taste and thought, we should be committed to ignorance about contemporary mistakes ; but by climbing to a point of vantage at a distance we can see the objects about us as they stand in relation to one another.

We are now in the position to set down the course of events in a summary. First there is the formation in early childhood of those phantasmata of the parents whence spring poetry and religion. If the image of the mother has been well formed, it is the basis of the idea of goddess in less sophisticated ages, and has been credited with an almost divine quality by the poets down to a recent date. A prominent feature of the beautiful image is the breast, " the soul of her beauty and love." In consequence, the breast of woman is charged with poetical and religious feeling and the exercise of its function is felt to be pleasurable and righteous. But if at any time there were to be a decay in poetical and religious feeling, then there might be a decline in the use of the organ from lack of interest and loss of significance. Yet the majority, unconscious of the full meaning of the desires and aspirations within, would know nothing of the reason for this failure. Has there been such a decay ? There can be no doubt about it.

II.

> Live thou ! and of the grain and husk, the grape
> and ivyberry, choose . . . and find
> Nearer and ever nearer Him, who wrought
> Not matter, nor the finite-infinite,
> But this main miracle, that thou art thou,
> With power on thine own act and on the world.
>
> *Tennyson.*

AMONG the many beautiful objects in the exhibition of Greek art held not long ago in London was a little figure of a goddess from Crete, who belonged to the period of Aegean civilization that preceded the true Greek culture. The skirt of the exquisite creature was cut in such a way that it might have come out of Sloane Street today, and the upper part of her garment was designed with a complete décolletage, disclosing the whole of her bosom. In those days princes had their protectresses and homes their household goddesses, but gods were few and unimportant. These goddesses needed no husband, just as the Jewish god needed no wife, although in their case the opposite sex did have a representation in the form of a serpent, our emblem to this day. Behind them all was a single archetypal figure, the Aegean Great Mother. We see, then, that when the first civilized Europeans had advanced beyond magic and animism, they derived their religion almost solely from the image of the mother, who could alone satisfy their needs. How deep is the significance of that little Cretan figure! Love, life, birth, death, the arts, the search for beauty, the care of the young, the green and the growing things of Nature are her theme. Three thousand five hundred years have passed since she was fashioned; the language of her artificer has long been forgotten; yet through her he achieves an eloquence that the centuries have not dimmed.

To get a clear view of the present scene one must first pass the intervening events in brief survey. The Aegean people were overwhelmed at length by Northern invaders, who owed their success to the discovery of iron, whereas the autochthonous race had only bronze. αὐτὸς γὰρ ἐφέλκεται ἄνδρα σίδηρος, "the iron itself attracts the man"—to do mischief on his neighbours. A hybrid race thence arose, from which sprang the flower of Greek civilization. The Aegean Great Mother faded away, but some of her offsprings were inextinguishable. Athena and Artemis, for instance, became maiden goddesses, the worship of Ariadne was merged into that of Aphrodite, and Hera displaced Dione as wife of Zeus, the invaders' chief god. The Greek Pantheon, a source of inspiration unequalled, a thing of beauty unparalled, with its parity of god and goddess, fostering alike religion and poetry, is a shining example of the admirable faculty for balance that characterized the Greeks. They showed as well a unique ingenuity in casting their repressions on to their gods and goddesses; but although this practice promoted an easy frame of mind, it led in time to the abandonment of belief in such unethical deities, while simultaneously the advance in knowledge was robbing the mythology of its credibility. The result was that the intellectual betook themselves to philosophy, the others to superstition, and after a life-time of about two thousand years the Græco-Roman system collapsed and another took its place.

Coming from the Orient, the next religion was wholly patriarchal. To meet the want that was felt in consequence, some have bestowed divine or quasi-divine honours upon a subsidiary figure, the Virgin Mary. An important attribute of this embodiment of the Divine Mother has always been the lacteal function. Just as in the famous picture of the origin of the Milky Way by Tintoretto the milk is seen spurting from Hera's nipples, as she feeds the infant Herakles, so in Bethlehem you may enter a grotto, where, tradition says, the Virgin fed her child, and where from the exuberance of her maternity a stream of her milk has left for ever a white splash upon the roof.

The first good joy our Mary had,
It was the joy of one,
To see her own son Jesus
To suck at her breast-bone;
To suck at her breast-bone, good man,
And blessed may he be,
Both Father, Son and Holy Ghost
To all eternity.

Beliefs change; but it never has nor could it be supposed that the Mother of God would fail to suckle her offspring: is there not, then, some defect of will in you, madam, who offer your child a rubber teat instead of your breast, some complaisance or too great self-esteem in you, sir, who are so ready with your bland advice "to put the baby on a bottle of National Dried"?

The lessons of philanthropy and brotherly love so wonderfully inculcated by the Founder of this religion have taken such deep root in humanity that here at least one hopes that of his Kingdom there shall be no end. The stately beauty of the liturgy has greatly endeared it to mankind. Its clergy, at any rate in our own land, have set an example of virtuous living, not least conspicuously from the domestic hearth. Yet now that a second period of two thousand years has rolled away, there is a repetiiton of the historical events of the first. Once again in the light of growing knowledge the mythology appears to be—mythology. Once again the attitude towards the presiding power is critical. "We no longer ask 'What does God think of me?' but 'What do I think of God?'" (W. M. Dixon). All the questions that the physical philosophers asked before have been asked again, and the same answers have been returned. The result is that whereas some men of today retain their old beliefs unimpaired, others are eclectic, welcoming the revelations of the new knowledge and seeking at the same time for fresh truths in old places, others embrace the new knowledge only, and then there is the multitude that is simply indifferent.

The most influential class today consists of those who find all that they require in the epistemology of science. Such men are strikingly unlike their predecessors of the last period. The Epicurean, for example, set himself to live wisely, righteously and beautifully, sought no power, mistrusted the state, looked with disfavour on the making of too many laws and evolved for himself a rarefied but beautiful religion. He did not use science for technical purposes ; and there, no doubt, is where the point of departure lies. Men today, seeing the huge technical achievements of science, are drunk with the sense of power. They believe that they can accomplish everything by planning, including the lives and activities of others. It has become a passion that nothing escapes. Nature is seen by them solely through the intellect ; religion has been ousted and poetry wrecked. The nineteenth century had high hopes of the twentieth, but so far they have not been fulfilled.

Poetry and religion are so similar in essence that they have met with fates that are not unlike. At the outset of the nineteenth century Wordsworth and Coleridge, shaking off the trammels of an out-worn formalism, embarked on their crusade for a return to Nature. The process was to be twofold, externally a perception of Nature by observation through the senses, internally a contribution by the creative imagination. The path was to lie through what they called the " affections," emotional rather than intellectual parts of the mind, of which we are not always fully conscious, and the resulting mood was to be " qualified by various pleasures." Exactly half a century after the publication of the *Lyrical Ballads* the founding of the Pre-Raphaelite Brotherhood performed a kindred service for painting and the allied arts. The Brothers made an advance upon their predecessors, the poets : they saw that all the arts have common ground and they perceived very clearly the unity of art and religion. Whereas the purely patriarchal and conventional religion of the Lake poets inspired only their worst verses, fine religious feeling is throughout a mark of the Pre-Raphaelites. The very first pictures of Rossetti were the beautiful Girlhood of Mary Virgin and the Ecce Ancilla Domini. During my lifetime the stream of their ideas has not simply dwindled away : it has been turned off sharply like a tap. The twentieth century has neither the wish nor the ability to carry forward the aims of these pioneers. It has turned its back upon them, because it has not the means of understanding their work nor the opportunity of learning how to perform it.

The mass of mankind now lives in vast aggregates, far larger than any city of the past. There they lead monotonous lives, exhibit an ever-increasing uniformity and are all too often engaged in the service of machinery. Excitements of a much more sensational kind than the arts can afford are necessary for them and they find them in the dance-hall and the picture-palace. Being entirely cut off from Nature, they can neither assimilate poetry nor give it forth : it is never heard in their utterance, never read, never quoted and never seen on their shelves. In the majority of men and women who have neither art nor nature as a background, although there may be technical proficiency, the power of independent thinking is not well developed. If their artistic or religious, or even their moral or political notions are evoked, nothing may emerge but echoes and unconnected fragments. An attempt to deliver an opinion may give birth to a sequence of statements altogether lacking logical connexion. The character may be amiable and the intentions good, but the thought is imitative and vague. Into the vacuum so created a stale materialism has flowed. When the taste has been so vitiated and the æsthetic sense so blunted, a simple pleasure such as this breast-feeding begins to lose its appeal and the beauty of it is no longer perceived. When an alternative is presented, only one question will be asked, " Will it work ? ", for utility is the sole guide.

In this predicament woman keeps in touch with Nature the better of the two sexes. She will still give her hand in marriage, still bear offspring and still maintain a corner of life not completely regulated ; she will also work eighty hours a week while her husband works forty ; but she receives little encouragement to perform her feminine functions. The same education is given to her as to a boy, and she must pass the same examinations to the same end, that is to earn her living in an industrial state. Even when she has begun to pursue her way, the clever man of today, indomitably proffering bad advice, would have her give up her child and put it in a nursery, that she might return to her former employment. The merchant, with his inflated prices, holds out the same temptation. Commercial greed and socialist theory, utilitarian philosophy and mechanical views of life work together against womankind. The Divine Matris Imago is being blotted out.

> To be a sweetness more desired than Spring ;
> A bodily beauty more acceptable
> Than the wild rose-tree's arch that crowns the fell ;
> To be an essence more environing
> Than wine's drained juice ; a music ravishing
> More than the passionate pulse of Philomel ;—
> To be all this 'neath one soft bosom's swell.
> That is the flower of life :—how strange a thing !
>
> *Rossetti.*

So she was perceived and so she perceived herself. But all this sense of wonder and beauty is passing away, and with it the emotional energy necessary to perform in full the female functions.

Breast-feeding is the first function to go because at present it is not essential, on account of the invention of feeding bottles, rubber teats, dried milk and other conveniences. Yet so far away from recognition is the underlying reason for this failure that it has taken me many years of wandering down the hidden ways of thought to find out what it is. Next, the production of children has been affected for some time, so I believe. It is common knowledge that the gradual fall in the birth-rate cannot be explained simply as the result of using contraceptives. A great many women are quite innocent on that subject, yet they do not on that account always reproduce unduly quickly. Forecasts of the birth-rate are made with the same assurance and meet with the same meagre success as forecasts of the weather. No one can tell what the birth-rate will be, for it will depend upon the frame of mind of human beings, especially of women, not upon calculations. Another feature of our time is the chastity that accompanies the free intermingling of the sexes. Better education and the decay of Puritanism, with its powerful counter-suggestion, are good reasons for this desirable state of affairs ; yet it would be permissible to suggest that frigidity, known to be common, might be partly responsible. If the present trends in thought, feeling and behaviour are not arrested, the phenomenon of menstruation may also become affected. There may of course *be* a change of heart ; but if on the other hand we continue to move or to be moved towards the planners' paradise, then there may be sterile virgins in the future with prolonged or permanent amenorrhœa, who will be set to do many of the less interesting tasks.

Yet when I look at the women with whom I am engaged, I find to my relief a conviction arising that they are made of material too good to succumb altogether to the age. At some time women, and men too, will begin to see what the needs of their nature really are. Then they will arise, to taste once more the fulness of life. Observing them, I detect resistant types. The students and I make guesses whether or not a mother has breast-fed her child, and we get our answers right with good success. First comes *Wholesomeness*, who has the answer to the old satirist's prayer,

> orandum est ut sit mens sana in corpore sano.

She brings with her something of fresh air and green fields, even if her home be in Long Lane ; and her beauty, whatever it be, she owes to Nature and not to the chemist.

> And her against sweet *Cheerfulnesse* was placed,
> Whose eyes, like twinkling stars in evening cleare,
> Were deckt with smyles that all sad humour chased,
> And darted forth delights, the which her goodly graced.

Next to her comes *Modesty*, whose hands shed a benison on her child, making all his days blissful ; yet she so governs her tender feeling that never through her is he led into folly. By her is her sister *Piety*, who delights to sing this old song, beginning,

The King of Love my Shepherd is
Whose goodness faileth never ;
I nothing lack if I am His
And He is mine for ever.
Where streams of living water flow
My ransomed soul He leadeth ;
And where the verdant pastures grow
With food celestial feedeth.

Last comes the *Cockney Wench*, who knows but streets and houses, yet her mother played country games on the pavement when she was little, wore feathers in her hat on high days, danced in the street to the music of the piano-organ, drank more than was good for her at times, got and gave a black eye, bore ten children, suckled every one and laughed and jested withal, a creature of earth we are sorry to lose, for she has become almost extinct.

If I have brought my argument to a successful conclusion, it will have appeared that the failure of the natural and normal function of breast-feeding, a failure which is on the increase and is now widespread, is a symptom of a more complex disorder, which in turn rests upon faulty feeling. Formidable difficulties—the divorce from Nature brought about by industrialism and over-population, the too sceptical attitude induced by scientific discovery—will have to be overcome or a new kind of man and woman will emerge, who lack alike poetry and religion. Their path lies in one direction, straight to a human ant-hill ; and thither they are visibly marching now. Without these twin forces the life of man moves in a perfectly meaningless pattern.

As whom his one intense thought overpowers,
He answered coldly, " Take a watch, erase
The signs and figures of the circling hours,
Detach the hands, remove the dial-face ;
The works proceed until run down ; although
Bereft of purpose, void of use, still go."

I ceased to follow, for the knot of doubt
Was severed sharply with a cruel knife :
He circled thus for ever, tracing out
The series of the fraction left of life ;
Perpetual recurrence in the scope
Of but three terms, dead Faith, dead Love, dead Hope.

To proffer service to the state as a substitute is not merely useless, it is damnable and dangerous. Not even philosophy will alone suffice, for it satisfies the intellectual but not the emotional life, and it is not always strictly honest. It is useless, too, to advocate return to the authority of the past. Freedom of thought has been won and dogma has had its day. We have come to the end of an age and must make a fresh beginning.

In considering thus the function of breast-feeding I have also sought to show that there are certain hidden things that have a reality in the mind : the question next ensues whether they as well represent anything outside the mind. The subject has been linked to poetry and religion, the cause of which was found to lie in phantasmata of the parents formed in early childhood ; but is this cause the *final* cause ? I should not care to intrude a metaphysical disquisition, yet the question is bound to arise and clearly there is need to indicate how it might be answered. Our debt to Greece is shown when I maintain that the philosopher who provides the best answer is Plato. His is the doctrine of the *ἰδέαι*, forms, models or archetypes, translated generally as the " Ideas." Primarily they are present in the mind of the Maker, whom Plato calls the Demiurge, and they are the causes of the world, which is but an imperfect, material representation of the Maker's thought. They inspire our minds, are creative, are realities and are not the products merely of our imagination. The three Ideas in the highest category are Goodness, Truth and Beauty. Faith is the activity derived from Goodness ; Wisdom finds the way to Truth ; and Love leads us to Beauty. The organized search for these two triads takes the respective forms of religion, philosophy, including natural philosophy or science, and poetry with the other arts. Beauty alone is perceived directly throught the senses. The phantasmata that I have described are fashioned by the phantasia or creative imagination into ideal shapes by virtue of the plastic energy of these Ideas. Our question, then, is answered: it is the Ideas in the mind of the Maker that are the final cause of religion and poetry.

Philosophers, who are not so much in contact with the ills of life as are physicians and surgeons, are insistent on a One, a Whole, an Absolute, as the author of all.

> All are but parts of one stupendous whole,
> Whose body Nature is, and God the soul;
> That, changed through all, and yet in all the same;
> Great in the earth, as in th' ethereal frame;
> Warms in the sun, refreshes in the breeze,
> Glows through the stars, and blossoms in the trees,
> Lives through all life, extends through all extent,
> Spreads undivided, operates unspent;
> To him no high, no low, no great, no small;
> He fills, he bounds, connects and equals all.

To those daily confronted with the discrepancy between suffering and merit, to those made painfully aware of the inherent weaknesses that beset man's nature, such a conclusion may sound too optimistic.

> I found him in the shining of the stars,
> I marked him in the flowering of his fields,
> But in his ways with men I find him not.
> O me! for why is all around us here
> As if some lesser god had made the world,
> But had not force to shape it as he would?

The Demiurge, it seems, is working with refractory material. "Mind has to get the better of necessity to bring created things to perfection" (*Timæus*). Or it may seem rather that our world has been born out of a contention of opposite principles, such as the love and strife of the poet-philosopher Empedocles.

> Was it Love broke forth flower-fashion, a bird with gold on his wings,
> Lovely, her first-born passion, and impulse of first-born things?

Whatever the truth, it is consciousness that makes us aware of these things, consciousness that bestows upon us the dignity of choice, that we may play our part in the drama that is being unfolded, and consciousness that is more wonderful than any mystery of space or time. We recognise thereby that this simple act of putting the child to the breast, an act, as Shelley says, in accordance with the law of love, is inspired by an idea of good, whereas to fob off a child with a bottle of cow's milk is a palpable falsehood. From three planes we see the custom as something praiseworthy, from the lowest because of its utility, from an intermediate because it so perfectly presents the Divinæ Matris Imago, and from the highest because, like a sacrament, it is "the outward and visible sign of an inward and spiritual grace."

MEMENTO

A lead plaque measuring 6 ft. by 3 ft. 6 ins. and bearing the inscription "1739 Guy's Hospital" has appeared recently, affixed to the northern exterior wall of the Counting House. It was the property of the late Dr. H. G. Biddle and Mrs. Biddle of The Cottage, Stradbroke, Suffolk, and was sold by auction in August, 1950, to a Mr. S. G. Leek, who resold it to the Hospital.

The Hospital were informed of the existence of this plaque by the Executor of the late Dr. Biddle. The evidence in their possession and the condition of the plaque, with flanges at the rear, indicate that it was part of one of the original water tanks installed in Guy's House. It was purchased by the Governors as an interesting souvenir of the early days of the Hospital and one which would form a permanent memento.

"Baltimore and Boston"—a Diary

By SIR HENEAGE OGILVIE, K.B.E., M.Ch.

(Concluded)

Monday, 23rd October.

A busy day at the College meeting. After registering and looking round, and deciding, after ten minutes in the great hall, that the General Assembly was not for me, I made my way to colour television. This was a revelation. In a large darkened underground hall, 17 viewing screens were installed, with about 50 seats before each and plenty of standing room as well. Definition, lighting, colour and focus were as near perfect as could be. Those who have seen monochrome television are, I think, all agreed that it is a pure waste of time as a means of surgical demonstration. Colour television, on the other hand, seems to be far better than colour cinematography. The lighting in the depths of a wound is all that one could wish ; the colour values are exact and blood does not look like tomato sauce as it does on the cinema, and reflection from moist surfaces seems to have been avoided—at any rate it does not confuse the picture. Spectators can see every detail of the operation as clearly as the surgeon himself, including the difficulties, and can hear his comments and curses. The only way the cinema scores is that an operation can be telescoped by omitting unimportant steps.

The screen before they begin looks white, but if you shift your gaze it immediately flashed into red, blue, green and yellow, and if you shake your fingers in front of your eyes it looks like a rainbow.

The picture when I arrived was the end of a lobectomy by Churchill. It was followed by a hysterectomy by Joe Meigs. With great courage he had picked a woman with the scars of two previous laparotomies, and a ventral hernia to be excised, but everything turned out lovely. There were no adhesions anywhere, and the peritoneum was so thin that the whole course of the ureter could be seen. The operation went without a hitch, and not a single vessel bled before it was clamped. Next day I watched Arthur Allen doing a gastrectomy for duodenal ulcer, and this went just as well.

In the afternoon there was a panel discussion on the thoracic approach to subdiaphragmatic lesions that did not get us much further. The idea of the panel discussion is that a group of experts discuss a problem on the stage in front of the audience, but the compéring of such a discussion is an almost impossible task. The result is much the same as a B.B.C. Brains Trust, and those who like Joad would enjoy these affairs.

In the evening we were invited to a banquet with the Regents and distinguished guests, and then trooped in in College gowns behind the Mace and to the accompaniment of martial music, to take our places on the dais for the Presidential meeting. We started with " God Save the King " ; we went on to installation of the officers, Fred Coller handing over the Presidency to Henry Cave, and to Jefferson's lecture ; we finished with " The Star Spangled Banner," one of the best of the National Anthems, though none are majestic as " Deutchland über alles."

Tuesday, 24th October.

I started with the Cine Clinic on Boston Surgery at the New England Medical Hall. This is one of the best of this year's innovations. A series of colour films of operations are shown, each lasting about 20 minutes, and the surgeon who operated is on the platform giving a running commentary.

The first film was an operation for coarctation of the aorta in an adult, by Herbert Adams of the Lahey Clinic. A fine film showing a very difficult operation. In an adult the collateral vessels have become enormous, and the aorta is often atheromatous. The approach involves the ligature and division of large and tortuous intercostal arteries in the spaces above and below the rib to be resected, and the suture of an aorta that may be friable and that will not stand tension. One or two patients have died of dissecting aneurysms some months after the operation.

After this Smithwick demonstrated the removal of a phæochromocytoma causing hypertension, Hartwell Harrison the removal of an adrenal by the posterior approach, and Richard Sweet a transthoracic partial gastrectomy and œsophagectomy for cancer of the lower œsophagus. Sweet left the spleen, and, after closing the distal end of the stomach, anastomosed the divided œsophagus to a round hole cut in its anterior wall.

At this point I hurried to the Mechanics' Hall to see Arthur Allen do a gastrectomy for duodenal ulcer on Television. Jimmy was at his best, technically and conversationally. In the early stages he emphasised that the operation was being done, not for Television, not for the surgeon, but for the patient, and if things got difficult and the surgeon's head got in the light it was just too bad for the audience. But everything went beautifully, indeed after a bit he remarked, " Everything is going a bit too well in this operation. You've got to be careful when you're getting everything you want, because a fattening hog ain't going to have any luck." Later, when he got to the ulcer, he said, " Once when Evarts Graham was watching me do this operation, he said, ' Jimmy Allen has now reached the silent stage of gastrectomy.' " And silent he was, for a bit.

I had lunch with Gerbode and two of his boys from Stanford University, San Francisco, who were presenting papers in the Surgical Forum. Gerbode is a strong supporter of the principle of exchange between English and American Universities at the Junior level.

In the afternoon I attended for a time a panel discussion on injuries of the hand, and in the evening heard Hans Selye address the Scientific Session on the General Adaptation Syndrome. He is an entrancing and fluent speaker, and while he talks one is deluded into believing that one understands what it is all about.

Wednesday, 25th October.

I started off again with the Boston Cine Clinic, which is one of the best shows in this Congress.

First Richard Overholt demonstrated segmental pulmonary resection, emphasising that the boundary between the segments are absolute but irregular, and are found with the finger better than with the knife.

Arthur Allen then did a right-sided hemi-colectomy for carcinoma of the ascending colon. He used a right paramedian incision. I was glad to see that he joined ileum to transverse colon end-to-end ; since I learned this from Grey Turner my troubles have disappeared.

David Boyd resected the cardia for cardiospasm.

Donald Matson of the Brigham then demonstrated uretero-arachnoid anastomosis for hydrocephalus. The kidney is removed. The upper end of the ureter is picked up by two silk threads. One lamina is then removed (usually L.II) the dura incised leaving the arachnoid unopened, and two silk stitches put in the edge of the cut. A polyethylene tube chosen to fit the ureter snugly is then given a gentle right-angle kink after dipping it in hot water, a small hole is made in the arachnoid and as the fluid spurts out the tube is inserted downwards towards the sacrum. The dural silk threads are then tied round the tube, whose surface has been scratched, and the other end, pulled through a tunnel in the lumbar muscles, is pushed down the ureter. The stitches in the ureter are tied round the tube and to the muscles.

This sounds a bizarre operation, but it certainly reduces the ventricular tension, and cases have remained well up to 3 years. If the kidney is not removed, incrustations form round the tube.

At 3.30 I took part in a panel discussion on " Pitfalls of Gall Bladder Surgery." On the platform were Warren Cole, Gavin Miller, Rodney Maingot and myself, with Waltman Walters as compére and question master. In front of each of us was a microphone. In the hall below was a sea of about 2,000 pink faces, each representing a surgeon. A great difficulty was that none of us could hear what any other member of the panel was saying : he spoke into a microphone, and echoing de-synchronised bellows came back from twenty loud speakers in every corner of the hall. Our answers must, therefore, have been to a great extent repetitive. The subject, however, was a good one, and produced two main controversies. The first was about the advisability of immediate surgery in acute cholecystitis, in which I was the only one against it, but found a surprising amount of doubt in the others about the wisdom of the policy they admittedly practised; unfortunately, surgical indications were clouded by financial considerations, and the two questions, "Should he be operated on?" and "Can he afford another ten days in hospital?" became inextricably mixed. The second argument was about when the common duct should be explored. I was delighted to find that all except one were against routine exploration, and considered it necessary in only about 20 per cent. of cases.

The scientific exhibits round the hall were much smaller than any I remember previously, but highly interesting. Two interested me particularly. The Peter Bent Brigham Hospital had a demonstration of a blood collection, storage and administration outfit. Everything except the needles was plastic and expendable. The blood is collected by gravity, and flows over a resin compound that removes the calcium, into a plastic container like a rubber hot water bottle, and the tube is sealed off by a hot clamp pressed across it. The containers can be stored and transported much more easily than glass ones, and dropped from planes. The giving attachment, including the drop counter, is plastic. When the blood is given, the patient is given calcium gluconate.

The second demonstration was one by the Dragstedt group of a series of experiments on the part played by the pyloric antrum in acid secretion. They showed that after vagotomy the acid secretion is reduced but not abolished. After transplantation of the pyloric antrum to some other place, such as the abdominal wall, where nothing enters it, secretion is reduced much further. After removal of the antrum secretion is still further reduced, but not abolished entirely, for the intestinal hormone still operates. When the antrum is re-transplanted into the duodenum or stomach a high acid secretion is again obtained, but the highest level comes when it is anastomosed to the colon. Apparently bacterial action has a powerful effect in stimulating hormone secretion.

In the evening we dined with Dr. Nichols and his wife, working together on the artificial kidney as a means of rapidly modifying the constituents of the circulating blood for research purposes rather than as a means of treatment. Their chief accomplishment to us was as members of the crew of Goose that helped to win the Seawanaka six-metre Cup for America at Cowes last year.

Thursday, 26th October.

Barnes, a Resident at the M.G.H. who had been dining with the Nichols', rang me up to say that Sweet was doing an œsophagus not for the circus. I therefore took a taxi to watch one of the most interesting men in thoraco-abdominal surgery today. The case was a mega-œsophagus in a woman of forty to fifty, very fat. The X-Ray showed a huge œsophagus, with a shelf over the aortic arch, and an S-bend below. He resected the IXth rib, found a completely adherent pleura and dissected it free, got a rubber strip round the œsophagus, crushed the phrenic nerve, and got the cardia and part of stomach up without cutting the diaphragm. He incised the narrow bit, all coats, and sewed up transversely. His technique was gentle and bloodlesss but not dilatory, the kind of surgery Halsted would approve of rather than the kind his third generation followers indulge in.

I had a good and highly-expensive lunch with Magdalen in the shaded-lights-and-hushed-voices department of the Statler, and hurried back to the Mechanics' Hall to hear a panel on acute abdominal emergencies.

The Chairman was Arthur Allen, and the panel consisted of Harold Foss of Danville, Pennsylvania, Horace McCorkle of San Francisco, and Mims Gage of New Orleans. The discussion was eminently practical, most of it in answer to questions sent up from the hall, and concerned for the greater part with appendicitis. The one contribution that shook me was an impassioned interjection by Mims Gage on the subject of Acute Pancreatitis. To him, and to all those who could see the light as he saw it, the problem was simple. Acute Pancreatitis is due to spasm of the sphincter of Oddi, allowing toxic bile to get up into the pancreatic duct and liberate trypsin. How do you cure it? Dead easy; you inject novocaine into the splanchnic nerves, "unlock" the sphincter, put the toxic changes into reverse, and cure the patient.

As soon as the local anæsthetic works the patient " can feel the sphincter relax." The trouble is over in 20 minutes. Cures are 100 per cent. There is of course no doubt that all diseases differ in different countries, and even in different parts of the same country, according to the race, occupation, dietetic habits and nutritional balance of the inhabitants : but this seemed an over-simplification. I cannot imagine that the injection of novocaine alone can " unlock " a sphincter blocked by a stone the size of a hazel nut, " reverse " the changes in a black sloughing pancreas, or " cure " a belly full of trypsin. The trouble is that most people who write and talk about acute pancreatitis today are not talking about acute pancreatitis at all but about patients with a belly-ache and a raised serum amylase.

Glimpses of the unusual. (1) Notice in a window, " Rubaiyat Room." Cocktails in a gracious " Khayamesque atmosphere." Presumably a loaf of bread and a " thou " set-up (blonde a dollar, red-head a dollar-and-a-half) included. (2) A lavatory seat with a violet glow in the up position that goes out when the seat is put down. Above it a notice " Since this seat was last used it has been sterilised by ultra-violet light."

In the afternoon Cattell took us to his lovely home for a real English tea and a look round his treasures. We took the night train to Montreal.

Friday, October 27th.

We went from Montreal station straight to the Ritz Carlton. At 11.00 Morton took me along to the Hospital, and, after looking round we joined in a surgical round, in which the residents showed cases and the whole staff discussed them. Talk to students at 3.30, a dinner at the Club in the evening, and after that I talked on peptic ulcer surgery with slides. My usual debunk of vagotomy as dog-surgery gone mad was announced by the paper next morning as a criticism of the value of animal experiments, a view which I was careful to explain in the lecture I did not hold.

Saturday, October 28th.

Morton and his wife took us for a trip into the mountains, a wonderful holiday playground—walks, climbing, sailing and swimming in the summer, skiing and skating in the winter. The country is much the same as that on the road from Toronto to Muskoka. The scenery is low mountains bearing the smooth and scored granite projections of the Ice Age, the remains of a primæval forest now covered with an irregular second growth, and innumerable small lakes studded with islands. On the way back we called at Beaver Town, where an enterprising Canadian has a breeding farm of tame beavers from which owners of property who wish to start a sanctuary can get breeding pairs. The beaver is really a large rat with a spade tail. One old boy showed off by cutting off a small poplar planted in a clump, and we watched them swimming, building their huts, and giving the alarm signal by a slap of the tail on the water.

The Mortons took us to the airfield and saw us off. The plane, another strato-cruiser, left punctually at 8.00 p.m. and we followed a favourable tail wind between 19,000 and 25,000 feet, getting to Prestwick in 10 hours. In another two hours we landed at Heath Row. Customs liked our nice honest faces, and we were soon home.

INNOMINATE CLUB

The 17th Annual Dinner of the Innominate Club, Chairman Mr. N. Eckhoff, will be held at the Trocadero Restaurant at 7.0 for 7.30 p.m. on Friday, 8th June, 1951. Dress optional. Tickets 23*s*. Will those who wish to attend please communicate with the Secretary, G. T. Hankey, Esq., 89, Harley Street, W.1. In the afternoon of 8th June, Innominate members will be welcomed to the Ward rounds, operations and Demonstrations given by the Senior Staff of Guy's Hospital. Will those who wish to attend please advise Mr. N. Eckhoff beforehand.

Obituary

ALFRED G. ALBERS.

MANY Guy's men, past and present, will have seen with great regret the report of the tragic death of A. G. Albers whilst climbing on Table Mountain on March 24th.

Alfred Gustave Albers was born in South Africa in August, 1914. He was educated at the Diocesan College, Rondebosch, and later at Cape Town University. He was awarded a Rhodes Scholarship from Cape Town to Oxford and went up to Oriel College in 1936. He came to Guy's in April, 1939, having completed his 1st and 2nd B.M. at Oxford. He qualified B.M., B.Ch., Oxford, in 1941, after which he held House Appointments at Pembury and Orpington. At the end of 1943 he returned to Cape Town and was posted to the South African Brigade in Italy, where he served until the end of the war. He returned to Guy's in 1946 and sat for his Primary Fellowship, which he passed, and then his Final Fellowship in 1949. He worked in the Genito-Urinary Department for twelve months in 1942–43, and on his return to Guy's after the war he decided to specialise in this subject. He was appointed Registrar in the Department shortly after his return, a post which he continued to hold until October, 1949. He went back to Cape Town at the end of 1949 and started practice as a genito-urinary surgeon. He was beginning to make a name for himself when his tragic death occurred.

"Ally," as he was known to most of his contemporaries, was a very keen athlete ; at Rugby Football he represented his School and University in Cape Town and he played for the Oxford University Greyhounds and for the Guy's team. He was always a keen supporter of the Guy's Rugby Club and acted as coach and adviser to them in his later years. He obtained a Boxing Blue when he was at Oxford, representing the University as a heavyweight. He continued to take a keen interest in boxing whilst at Guy's and was always to be seen at any function organised by the Hospital Boxing Club.

In himself he was a most charming person and, despite his large bulk, he had light hands and was very gentle in all his work. He made friends with all with whom he came in contact and he was always seeking to help the patient in distress. There are several old Guy's patients for whom he found jobs or living accommodation after they had recovered from an illness in the Hospital. When he left Guy's he was rapidly becoming a skilful and competent surgeon and there is little doubt that he would have made a great success of his future career.

He married Lady Prunella Douglas-Hamilton in July, 1950, she having gone out with her two children to join him in Cape Town. His wife was climbing with him when he fell to his death, and it is to her and to his mother that we must offer our most sincere sympathies on the loss of this fine character, so worthy of the many outstanding Guy's men who have come to us from South Africa.

W.D.D.

FOUNDER'S DAY, 7th MAY, 1951

Founder's Day (6th May) occurs on a Sunday this year. The Governors have therefore decided that it should be commemorated on Monday, May 7th. Accordingly a service will be held in the Hospital Chapel at **12.30 p.m.** on that day.

The address will be given by the Rt. Rev. The Lord Bishop of Southwark.

VISITORS

We have recently had the pleasure of a flying visit from an old Guy's man, Mr. Roland Hofmeyr, L.D.S., from Cape Town, accompanied by his wife. Mr. Hofmeyr, who was at Guy's from 1919-1923, flew over to England for the marriage of his two sons, Dr. Jan and Mr. Paul Hofmeyr.

We also had a visit from Dr. Harry Epstein (1925-1928) of Johannesburg, who called in to see us on his way from America.

Sport

ASSOCIATION FOOTBALL

Southern Amateur League

Guy's *v.* Cuaco

3rd April, 1951
Away. Result—Draw 2—2

Guy's quickly took up the attack and, after continued pressure, became a goal up when a hard ground shot from Shea on the left wing was only partially parried by the goalkeeper and Harris coolly placed the ball in the net.

In the second half Guy's increased their lead when a corner by Leckie was headed in by Fearn. Then Miller, the Scottish amateur international, was going through in the penalty area when Southgate tackled him and, being off balance, fell with a loud exclamation. The obvious happened, and he converted the resultant penalty. This misfortune really upset the smooth working of the Hospital and they were thrown on the defensive and with five minutes to go the opponents' right wing scored with a difficult bouncing shot, the spin of which deceived the Guy's custodian.

Guy's *v.* Kew Association

7th April, 1951
Away. Result—Lost 1—7

Guy's *v.* National Provincial Bank

10th April, 1951
Away. Result—Draw 0—0

ATHLETICS

The Guy's Hospital Athletic Club's Annual Sports will be held this year on Saturday, 26th May. They will be followed by a dance in the evening.

ACADEMIC

April

		Exhibition. Surgical Department. "Fractures."
23rd	1.00.	Dr. MacKeith. Clinical Lecture. "What Fit is This ?"
24th	1.00.	Dr. Howard Gray, M.D., Mayo Clinic. Clinical Lecture. "The Mayo Clinic and Mayo Foundation."
26th	1.00.	Mr. Glover. Clinical Lecture.
	4.30	X-Ray Meeting Gordon Museum.
27th	1.00.	Dr. Kauntze. Clinical Lecture. "The Treatment of Heart Failure."
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
28th	10.00.	Surgical Department. Clinico-Pathological Meeting. Clinical Theatre.
30th	1.00.	Mr. Stamm. Clinical Lecture. "Surgical Treatment of Arthritis of the Hip."

May

		Exhibition. Surgical Department. "Burns."
1st	1.00.	Mr. Hutton. Clinical Lecture. "Avoidable Anæsthetic Deaths."
3rd	4.30.	X-Ray Meeting. Gordon Museum.
	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
4th	1.00.	Dr. Mann. Clinical Lecture.
	2.15.	Medical Department. Combined Round. Preclinical Classroom.
7th	12.00.	M. F. N. Doubleday. Anatomy Theatre. "Local Anæsthesia."
	1.00.	Dr. Baker. Clinical Lecture.

Hospital Information, etc.

GUY'S HOSPITAL
DENTAL DEPARTMENT

Applications are invited from registered Dental Practitioners for the following appointments to commence duties on 1st October, 1951:

Department of Conservative Dental Surgery.

5 Registrars to attend for 6 sessions each per week
5 ,, ,, ,, ,, 3 ,, ,, ,, ,,
3 ,, ,, ,, ,, 2 ,, ,, ,, ,,

1 Administrative Dental Officer to attend for 6 sessions per week.

1 Full-time Assistant to the Visiting Dental Surgeons.

Department of Preventive Dentistry.

2 Registrars to attend for 6 sessions each per week

Extractions and Minor Oral Surgery.

1 Registrar to attend for 6 sessions per week.

Casualty Department.

1 Registrar to attend for 5 sessions per week.
1 Registrar to attend for 6 sessions per week.

Department of Mechanics and Prosthetics.

2 Registrars to attend for 6 sessions each per week
2 ,, ,, ,, ,, 3 ,, ,, ,, ,,
2 ,, ,, ,, ,, 2 ,, ,, ,, ,,

Dental Department for Children

1 Registrar to attend for 6 sessions per week.
2 Registrars to attend for 3 sessions each per week

1 Assistant Clinical Pathologist (Dental) to attend for 3 sessions per week.

The posts will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service. Forms of application are obtainable from the Dean, Guy's Hospital Dental School, London, S.E.1, to whom applications should be sent not later than **Saturday, 5th May, 1951.**

Applications are also invited for the appointment of Half-time **Demonstrator in Special Anatomy and Histology** and forms of application should be submitted to the Dean not later than **Saturday, 5th May, 1951.**

APPOINTMENTS VACANT

Guy's Hospital and Medical School

Applications are invited for the following Junior Staff appointments for the session, 1951–52 :—

Medical Registrars	2
Junior Medical Registrars	3
Junior Assistant to the Director of the Department of Medicine	1
Surgical Registrars	4
Junior Assistant to the Director of the Department of Surgery	1
Obstetric Registrar	1
Genito-Urinary Registrar	1
Orthopædic Registrar	1
Chief Assistant to the Department of Anæsthetics	1
Anæsthetic Registrar	1
Hæmatological Registrar	1
Neurosurgical Registrar (from 16.1.52)	1
Chief Assistant in the Neurological Department	1
Neurological Registrar	1
Chief Assistant in the Department of Psychological Medicine (P/T)	1
Registrar in the Department of Psychological Medicine	1
Registrars in the Department of Psychological Medicine	5
B.M.R. and Endocrine Registrar (P/T)	1
Radiotherapy Registrar	1
Assistant in the Department of Diagnostic Radiology	1
Chief Assistant in the Department of Diagnostic Radiology (from 1.1.52)	1
Registrar in the Department of Diagnostic Radiology	1
Registrar to the Physiotherapy Department (one from 1.12.51)	2
Dermatological Registrar	1
Ophthalmic Registrars (P/T)	4
Registrars to the V.D. Department (1–Female Annexe, 1–Male Annexe)	2
Tutor in charge of the preliminary clinical period class	1
Chief Assistant in the Department of Clinical Pathology	1
Assistant Clinical Pathologists	3
Assistant Clinical Pathologist (Evelina)	1
Assistant Lecturer in Physics Department	1
Junior Lecturers in Anatomy Department	4
Junior Lecturer in Anatomy Department (P/T)	1
Junior Lecturers in Physiology Department	2
Junior Lecturer and Gull Student in Department of Morbid Anatomy and Histology	1
Junior Lecturer in Department of Morbid Anatomy and Histology	1
Junior Lecturers in Bacteriology Department	2
Junior Lecturers in Department of Chemical Pathology	2
Assistant to the Director of the Student Health Service	1

Forms of application obtainable from the Medical School Office and should be lodged with the Dean not later than **16th May, 1951.**

R.M.O., NUFFIELD HOUSE

Applications are invited for a **Locum Tenens** in the post of **Resident Medical Officer, Nuffield House,** during the period April 23rd to August 2nd. Salary at the rate of £700 per annum, with a deduction at the rate of £100 per annum for board and lodging. Applications should be lodged at once with the Superintendent, Guy's Hospital.

Applications are invited for the appointment of **Registrar** (part-time) to the **Ophthalmological Department,** with attendance on two Sessions per week. Appointment to date from 7th May to 30th September, 1951, in the first instance.

Forms of application are obtainable from the Medical School Office and should be lodged with the Dean not later than **24th April, 1951.**

DEBATING SOCIETY

The Open Debate on "National Lottery" will be held on **Monday, April 30th, next,** and not on April 23rd.

UNIVERSITY OF LONDON

The following have been recognised as teachers in the Faculty of Medicine :—

Chapple Gill-Carey, Otorhinolaryngology, Institute of Laryngology and Otology.

C. P. Blacker, Mental Diseases, Institute of Psychiatry.

J. N. Hunt, Physiology, Guy's Hospital.

P. McG. Moffatt, Ophthalmology, at the Institute of Ophthalmology.

A Board of Pre-Clinical Studies will be established from 1st April, 1951, belonging to the Faculties of Medicine and Science, and its personnel for the remainder of the year 1951 includes the names of the following Guy's men : Dr. C. B. Allsopp, Mr. G. E. H. Foxon, Prof. G. A. D. Haslewood, Prof. J. M. Robson, Prof. W. R. Spurrell, Prof. G. Stead, Prof. J. Whillis.

CHANGES OF ADDRESS

P. D. Bryant, M.D., R.M.O., Royal Berkshire Hospital, Reading, Berks.

W. B. D. Maile, M.A., M.D., Hill End, Hill View Road, Woking, Surrey.

K. O. Rawlings, M.D., 62, Queen Anne Street, London, W.1, and Highfield House, Knockholt, Kent. Tels. : Welbeck 8626 and Knockholt 2108.

Surg.-Cmdr.(D) S. Ross Wallis, Staff of Commander-in-Chief Home Fleet, H.M.S. "Indomitable," c/o G.P.O., London.

BIRTHS

FOLEY.—On April 7th, 1951, at Hammersmith Hospital, to Pixie (née Wilson), wife of John Foley, M.R.C.S., L.R.C.P.—a sister for Adam Sean.

HOWELLS.—On April 2nd, 1951, at Kowloon Hospital, Hong Kong, to Rita (née Jones), wife of Nat R. Howells, B.D.S.—a son, Richard.

KILBY.—On April 8th, 1951, at Guy's Hospital, to Ursula (née Dean), wife of John V. Kilby, M.B., B.S.—*a daughter (Ursula Ann).*

McLAUCHLAN.—On April 3rd, 1951, at Galley Hill Nursing Home, Cookham, Hants, to Sheila (née Chittleburgh), wife of Alan E. McLauchlan, M.B., B.S.—a daughter (Marianne Margaret).

MARRIAGES

DRAKE—CLARKE.—On March 17th, 1951, at Bassingbourne Congregational Church, Cambs., Peter F. Drake, M.A., of Cambridge, to Judith P. Clarke, S.R.N.

DEATHS

BANKART.—On April 8th, 1951, Arthur Sydney Blundell Bankart, B.Ch., M.Ch., F.R.C.S., of 95, Harley Street, London, W.1.

GIBSON.—On March 20th, 1951, John Hutchinson Gibson, M.R.C.S, L.R.C.P., of Lansdowne Road, Aldershot, Hants, aged 92 years.

SHORLAND.—On February 7th, 1951, Ernest Trevor Shorland, J.P., M.R.C.S., at Westbury, Wilts., aged 78 years.

Eds {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

1851 was the year of the Great Exhibition. The Festival of Britain, opened this week by His Majesty the King, is designed to commemorate the centenary of that event and to display the contribution which this country has made in science and the arts to world civilisation. In medicine as much as in any other branch of science has this country made notable advances and in these Guy's has played it's part. At this moment, therefore, it may be fitting to cast our minds back to the Guy's of 1851, to recall the part which it has played during the intervening 100 years, and to turn our minds for a moment towards the future.

A hundred years ago the foundations of the British Empire were already laid. Abroad Canada and Australia were developing from primitive settlements into prosperous colonies. India was a source of great wealth as well as great worry. New Zealand would shortly obtain self-government as also would Cape Colony. At home the Industrial Revolution was in full swing. Huge private fortunes were being built in industry, but hunger, squalor, disease and dirt were the share of the common working man. The Irish potato famine was a recent horror. The Corn Laws had but recently been repealed. London was as bad as any industrial city in the awful living conditions of its poor and in the Borough and in other poor parts of London several families might be found forced to share one single damp room as their sole living accommodation. Disease, under such conditions, was not unnaturally widespread and though vaccination had reduced the incidence of small pox, cholera was epidemic. The water supplies were bad, drainage worse, and the wonder is not that infectious disease spread so swiftly but that the population survived so well.

Yet despite all these shortcomings there was progress. The Public Health Act had been passed and in many branches of medicine were being laid those fundamentals which in two or three decades should astonish the world by the rapid advances to which they led. Many came from abroad. In Germany, pathology under Virchow was growing rapidly. In France Claude Bernard was making great progress in physiology. In America ether anæsthesia had been discovered. Though Pasteur had not yet established the germ theory of disease, though Koch was still a boy, Davaine had already shown the cause of anthrax, Oliver Wendell Holmes had published his paper on puerperal fever and Semmelweiss his observations on puerperal pyrexia. It would not be long before the new science of bacteriology was established. In this country, too, medical advances of all kinds were being made. Guy's had already become famous for the work done there in the previous half of the century but seldom indeed can so many men have enriched a hospital by their brilliance at the same period. Bright had retired but was still living. Addison was in his prime. Astley Cooper had died ten years and Aston Key two years previously, but John Hilton, now a full surgeon to the Hospital, held the Lectureship in Anatomy and William Gull that in Physiology. Small wonder that the Medical School, founded in 1826 by Benjamin Harrison, was flourishing !

Guy's, then, in 1851 was an active, growing Hospital. New buildings were being planned and built, new ideas were gaining ground and the great advances in medicine which had been coming from the Hospital for some years past continued unabated.

As the century wore on and this " Golden Age " began to pass there were still individuals in plently to keep Guy's to the forefront of medical affairs. Addison continued at the Hospital until 1860, Gull until 1866, Hilton until 1870, Charles Fagge until 1883, Wilks until 1885, Bryant until 1888 and many original papers continued to flow from their pens. " On the Constitutional and Local Effects of Disease of the Supra-renal Capsule " appeared in 1855. In 1857 came Wilks's original description "On the Syphilitic Affections of the Internal Organs " (until then syphilis was believed a cutaneous affection). The famous " Lectures on Pathological Anatomy delivered at Guy's during the summer season 1857–58 " by Gull came at the same time as his writing on " Paraplegia " in 1856, '58 and '66. In 1865 came Wilks's paper describing " Hodgkin's Disease." In 1874 came his article " On a Cretinoid State Supervening in Adult Life in Women." In 1880 Mahomet produced his work on " Chronic Bright's Disease without Albuminurea." Nor were the greatest contributions only from physicians. Even before the Listerian era, which started in 1865, new surgical operations and techniques were being devised at Guy's. The work of Astley Cooper and Aston Key belongs to the first half of the century but as may be seen from a perusal of the Guy's Hospital Reports for those years, surgical advances did not cease with their death. In 1852 Hilton wrote on " Colotomy." In 1859 Forster described " Gastrostomy," in 1866 Bryant wrote on the excision of the spleen, whilst the Lectures entitled " Rest and Pain " by John Hilton, which were published in 1863, have been an influence on surgical thinking to this day.

Towards the end of the century, as the Victorian era began to draw to a close, great social changes throughout the land had taken place. The way people lived and thought and what they believed had greatly altered since the Queen had come to the throne. These changes had their counterpart in medicine—not least in the nursing profession. Before the Crimean War in 1853 nursing was a profession of poor repute. Both nursing and personal standards were low. "Drunk, all of them, even the Sisters " was the comment of one writer at the time. The reforms, however, started by Florence Nightingale spread far, and by the close of the nineteenth century nursing had become an honourable profession. In no place was this more evident than at Guy's.

With the arrival of the twentieth century and as the Edwardian era came and went and the Great War approached, there were subtler changes occurring. The giants had departed; the last, Sir Samuel Wilks, died in 1911. Guy's was no longer to rest solely upon the medical genius of a succession of individuals. There were certainly still such men. Arbuthnot Lane, whose life from 1856–1943 spans most of our period, was a genius. His work ranged from the development of the " no-touch " technique in orthopædic operations to the use of intravenous saline in hæmorrhage, from the screwing and plating of fractured bones to operations for cleft palate, and of him it was written that his contribution to surgery was an " originality of conception and perfection in execution, and none who witnessed his work will gainsay that he must be ranked amongst the greatest technical operators of his or any other age." Arthur Hurst had a brain no less fertile in the realm of medicine than Lane's in that of surgery. Though he was especially interested in the study of functional nervous disease his originality was brought to bear on many others too. He was a great teacher, and his contemporary, John Ryle, whose death we mourned so recently, was another. If Ryle had written nothing but the " Natural History of Disease " he would have made a permanent mark in medicine. He did much else and we are still too close to his death to evaluate it. Perhaps the future still show that the foundations of Social Medicine which he laid by his work at Oxford were of far reaching consequence, more so than some may now consider them. Yet these three men and others amongst their contemporaries were but one reason for the reputation which was maintained by Guy's. Guy's was emerging as a hospital whose fame rested also upon its development as a large, efficient, modern teaching hospital. This phase has continued until the present time, and we must always remember the work of Cosmo Bonsor and Cooper Perry earlier in the century for their part in this development. Of the long list of notable teachers of medicine and surgery which Guy's has seen in this century we could write much for it seems to us that if from 1851 to the turn of the century the contribution of Guy's to medicine was in the discoveries being made here then in this century it has also been in the teaching and practice of medicine itself.

What, then, of the future? The proposals for the rebuilding of Guy's published recently in the *Gazette* were received everywhere with enthusiasm by Guy's men and outside critics alike. Whether, however, the treatment to be dispensed within its walls will be worthy of the old Guy's remains a challenge for the future to meet. Guy's is no longer a voluntary hospital but we have a voluntary hospital tradition which, if it is worth anything at all, ought to be well able to withstand the most insidious effects of governmental departmental control. Yet whether we think of the past or the present or the future we must remember that though hospitals and doctors change the needs of the sick change little. The sick, whether in 1851 or 1951 or 2051, and whether they be attended by the most brilliant or the most ordinary of medical men, need good treatment, great consideration and much kindness. They are not "cases" but people: to remember this has always been the boast of Guy's. We trust it will always be so.

On Friday last Guy's had the honour of a short visit from H.R.H. the Duchess of Gloucester. After attending a service of commemoration in Southwark Cathedral Her Royal Highness, attended by members of the Board of Governors and the Southwark Borough Council, visited the Nurses' Home where she was entertained to tea.

Obituary

JOHN HUTCHINSON GIBSON

DR. HUTCHINSON GIBSON, of The White House, Lansdowne Road, Aldershot, whose death occurred recently at the age of 92, was born at Bassingthorpe, Lincs., was educated at King's School, Grantham, and qualified at Guy's in 1882. He settled in Aldershot in 1886 and joined practices with Dr. Stroyan.

Dr. Gibson had a great share in the starting of the Aldershot Hospital and the preparation of the plans, and was senior physician on the staff and chairman of the Medical Council for some years before retiring from practice in 1948. He held the appointments of medical officer to the Farnham Guardians for many years and afterwards to the Hants Public Assistance Committee. Besides being public vaccinator he was police medical officer for some years.

He was much interested in all branches of archæology and particularly in local history. A member of the Royal Archæological Institute of Great Britain, the Surrey Archæological Society and Hampshire Field Club, he frequently contributed to their publications and gave talks during their outings. He wrote the history of Aldershot Parish Church.

ART EXHIBITION

The Art Exhibition to be held in the Gordon Museum will open on June 4th. Mr. Johnson of the museum staff has kindly agreed to accept exhibits in his room adjacent to the skin section in the basement on May 28th and 29th. If anyone is unable to deliver them at that time they can telephone Miss Waldron in the Illustration Dept., Hop 3500 Ex. 395, who will be pleased to make other arrangements.

The name of the artist and title of the picture must be clearly marked on the back and a separate copy in block letters sent with it on a piece of card for reference purposes. It is hoped that all work will be original but if they are copies the origin must be stated.

The Limitations and Hazards of Penicillin, the New Antibiotics and some recently discovered Chemotherapeutic Drugs in the Treatment of Skin Diseases

By E. J. Moynahan, M.R.C.P.
Assistant Physician to the Dermatological Department, Guy's Hospital.

DERMATITIS due to penicillin, following the external application of the antibiotic in the treatment of various skin diseases, is becoming increasingly common, and is now responsible for over 2% of the new cases seen in the dermatological clinic at Guy's. If this increase continues, and the incidence of penicillin contact-dermatitis at Guy's is representative of that for the country as a whole, then a problem arises as serious as that presented by sulphonamide dermatitis in the armed services during the recent war. The lessons from this military experience appear to have been well learned, and the majority of practitioners is well aware of the risks of sensitization to the sulphonamides when these drugs are applied to the skin.

The profession does not realise that penicillin too, is a powerful skin sensitising agent, nor is it fully appreciated that skin sensitisation may preclude the subsequent use of the drug as a life-saving measure in a serious systemic infection. The risk of sensitisation has been estimated to be as high as 1 in 10 for penicillin, when it is applied for longer than five days. Therefore, no one who risks such sensitization by prescribing the antibiotic for external use can resent the accusation that he is blunting a fine tool. Nevertheless the general practitioner can hardly be blamed when we find that the 1950 edition of a very popular dermatological textbook written especially for him, states in one place that penicillin is a cheap and useful external remedy for various skin diseases, but elsewhere that it should not be applied to the skin because of the high risk of sensitisation! The latest edition of Sir Alexander Fleming's " Penicillin " likewise contains equally contradictory statements. Here we find the surgeons sprinkling penicillin on wounds and burns as light-heartedly as one sprinkles sugar on stewed plums, whilst the allergist wisely warns us of the risks and dangers of sensitisation. The dermatologist in the team performs a remarkable feat of fence-sitting, and contrives neither to recommend, nor to condemn outright, the external use of the drug.

Penicillin cream has been recommended as the first-aid dressing for thermal and radiation burns, as well as other injuries, in the event of atomic attack. Since many victims of such an explosion will require systemic treatment with penicillin to tide them over the period in which the effects of radiation are maximal, sensitisation to the antibiotic may have the most serious consequences. It should always be remembered, that alternative antibiotics may not be available in the quantities required to deal with the large number of casualties which may follow an atomic attack.

The thesis which this contribution seeks to establish is that no antibiotic (other than tyrothricin or bacitracin) should ever be applied to the skin, because of this high risk of sensitisation. The same ban applies to the whole range of sulphonamide preparations. It will not be our purpose to give a short account of dermatoses in which the systemic use of the antibiotics is of value, and the reader will appreciate that a definitive assessment for the newer agents is not yet possible. It should be borne in mind that these drugs are expensive, as well as scarce, and it behoves us at all times to avoid extravagance. It is sometimes forgotten that it is not good medical practice to prescribe an expensive remedy when a cheaper and equally effective drug is available. It would be true to say that the epoch in which we could say " Hang the expense ! " is finished, and we should always bear in mind that any unnecessary burden imposed on the Health Service may impede its development, and may even hold up the advance of medicine in this country.

HISTORICAL.

In 1932, Mietzsch and Klarer, two German dye chemists, synthesised a new red dye—sulphamidochrysoidin (prontosil). This was the prelude to Domagk's work which led to its introduction into clinical practice in the treatment of bacterial infections, particularly those due to the gram-positive cocci. Shortly after this it was shown by the Tréfouels, Nitti and Bovet, working in Paris, that *p*–amino benzene sulphonamide (sulphanilamide) is the active group in Prontosil. A whole series of sulphonamides were synthesised in the succeeding years, and some were introduced into practice, where they achieved the brilliant success with which we are all so familiar. Sir Leonard Colebrook, in this country, deserves special mention in establishing their value. However, it is salutary to remember that sulphanilamide had been synthesised by another German chemist, Gelmo, many years before in 1908, but no one was aware of its biological properties until Domagk's work. It has been estimated that upwards of 1,000,000 lives were lost in the 1914–1918 war because of this ignorance, and one wonders how different the history of this century would have been, had the sulphonamides been available in the autumn of 1914, when the French armies, in particular, lost so many wounded; from the results of which stemmed the unhappy events of 1939.

It was not long before the sulphonamides were tried as external applications in the treatment of skin diseases, following their brilliant triumphs in the management of systemic bacterial infection. Early in the 1939–45 war enthusiastic accounts appeared in the literature extolling their value in the treatment of various dermatoses. Their use in the form of creams, lotions, sprays, ointments and powders increased rapidly, but by 1943 reports began to mention the risk of sensitisation when these applications are used, and later experience showed that topical applications containing these drugs cause sensitisation dermatitis in a prohibitively high proportion of the patients on whom they are tried. This sensitisation carries with it the risk that the subsequent administration of the drug, by whatever route, will cause a flare-up of the dermatitis and may even give rise to a generalised exfoliative dermatitis. The writer well remembers a period in the last war when a quarter of the beds in a dermatological unit of the Royal Air Force was in the permanent occupation of a succession of these cases, nearly all of which had become sensitised in the course of treatment for comparatively trivial pyogenic infections, such as impetigo. Sulphonamides have photosensitising powers, and this sensitivity to light was responsible for the invaliding from the service of some of these cases. Cross-sensitivity to procaine and other anæsthetics with the *p*–amino–benzoic acid group in the molecule, is not uncommon in persons sensitised to the sulphonamides, and as several nail lacquers contain sulphonamide resins, these may cause a flare-up of the dermatitis in women.

Sulphonamide dermatitis is not common now-a-days, but its place has been taken by penicillin, and the student may be interested in its history, before we deal with what is its only vice—contact dermatitis.

Penicillin is the classical antibiotic, is unique in being non-toxic, and if it were not for its allergic properties it would be a perfect therapeutic agent. An antibiotic has been defined as an antimicrobial agent produced by a living organism, and Pasteur and Joubert, who observed that certain bacteria could inhibit the growth of anthrax, as early as 1877, may be regarded as the first to report antibiosis. Emmerich and Low, who in 1899, used the enzyme *pyocyanase* in the treatment of experimental infections in animals, may be considered the pioneers in antibiotic therapy, but this did not find a sound base until Sir Alexander Fleming's classic discovery in 1928. In that year the accidental contamination of an agar plate by the mould Penicillium notatum was found to inhibit the growth of staphylococci in Fleming's laboratory at St. Mary's Hospital. The subsequent story is well known—how Fleming followed his observation further and was able to show that the active principle produced by the mould, and which he named penicillin, was non-toxic and effective against the gram-positive cocci. Raistrick and his colleagues tried to extract this active principle but found this task to be too difficult. There matters rested, until Sir Harold Florey and his co-workers at Oxford tackled the problem just prior to the war. In spite of war-time stringencies—and after cultivating the mould in bed pans, in the absence of more suitable flasks !—

Florey and his team were rewarded in their efforts. In August, 1941, they were able to report the first series of clinical trials with this remarkable substance. Skin infections, treated by local applications of the antibiotic, were included in this pioneer report. As time went on, with the introduction of large scale production in the United States, penicillin became more plentiful and its use as an external agent was recommended with even more enthusiasm than had been the case with the sulphonamides. After all, penicillin was non-toxic—unlike the sulphonamides—and it was more potent against more bacteria! What more could the unthinking physician or surgeon wish for? Penicillin was more plentiful in the United States and it was from there that the majority of the early reports of sensitisation, following its external use, originated. It also transpired that penicillin did not give significantly better results, compared with older and more traditional remedies, when used in topical applications. So much so that the editors of the 1946 Yearbook of Dermatology were constrained to write: " The conclusion is therefore inescapable that, though valuable in exceptional cases penicillin is *not* particularly suitable as a *topical* medicament . . . " and earlier in their review of advances in treatment they drew attention to both its sensitising potential, and to the dangers of this sensitisation if the antibiotic has to be given as a life-saving measure.

Tyrothricin was discovered by Dubos about the same time that the Oxford team began their work on penicillin. Dubos, a French microbiologist working at the Rockefeller Institute, deserves special credit as the first person deliberately to seek an antibiotic. This he did by feeding cocci to the organisms in a soil and found that under these conditions a gram-positive, spore-forming bacterium, *Bacillus brevis*, could be recovered. When this bacterium was cultivated, a powerful antibiotic was produced in the medium. This antibiotic was found to consist of two polypeptides, tyrocidine and granicidin, the mixture being known as tyrothricin. Tyrothricin is much too toxic to be used systemically, but as it has a low sensitising index and an antibacterial range rather wider than penicillin, it would seem to be the antibiotic of choice for local use. Furthermore, even if the patient becomes sensitised to it, this does not carry with it the serious consequences that sensitisation to penicillin does, because tyrothricin can not be used in the treatment of systemic infections. It is also effective against some fungi, whereas penicillin is not only inert as a fungistatic agent but may provoke various skin eruptions, because of an allergen common to both fungus and crude penicillin, if the antibiotic is used to treat fungus infections. Tyrothricin does not seem to have established itself as securely as one would expect, but there can be no doubt that if penicillin had not been available in the war tyrothricin would have taken its place, combined, of course, with the systemic use of the sulphonamides.

Since the war a number of other antibiotics has been introduced into general use. Space forbids mention of their individual history.

General Remarks.

Dermatitis due to penicillin does not differ in any significant respect, clinical or histopathological, from dermatitis due to sensitisation by any other substance. We are still ignorant of the intimate biochemical processes involved. Landesteiner and Chase have thrown considerable light on the possible mechanisms whereby a chemical substance may form a complex with a protein in the intact living animal, and how this newly-formed complex may behave as an antigen. Pauling has offered an attractive hypothesis regarding the probable weak intermolecular forces which are responsible for making the new complex. Until a great deal more is known about the stereochemistry of the protein molecules concerned, not to mention their identity, little definite can be said about the way in which penicillin forms these complexes with the skin proteins. We are also ignorant of the reasons underlying the marked differences, between one species and another, in the ease with which skin sensitisation can be produced. The guinea pig is relatively easy to sensitise, whilst it is very difficult to sensitise the cat, and man himself is the most suitable experimental animal for this type of work; which is a circumstance of dubious value at times, as the renowned Bruno Bloch must have thought when he had so sensitised himself to primula extract, that he was unable to be in the same building when extracts of the plant were being prepared by his pupils. Nurses who become thoroughly sensitised to penicillin, of which there are several at Guy's, and who promptly develop an attack of giant urticaria if they are in the same room while the antibiotic is being prepared for injection, know well what sensitisation means.

In the account which follows penicillin dermatitis will be our chief concern, but with very little change the story could apply to almost any dermatitis medicamentosa.

FUNGI AND PENICILLIN SENSITIVITY.

Before proceeding any further we must consider the possible role of previous fungus infection in the pathogenesis of penicillin sensitisation. Peck and his pupils in the United States have studied this problem very thoroughly, and seem to have established that there is a connection between previous skin infection with one or more of the common dermatophytes and penicillin sensitivity. Thus, they found that there is a greater likelihood that a person with a positive trichophytin test (indicating previous or present fungus infection), will not only develop a penicillin sensitisation dermatitis, but that nearly 10% of such subjects will show sensitivity to penicillin (as revealed by scratch test), without previous contact with the drug! These findings enable one to offer an explanation for the sex disparity in the incidence of primary penicillin sensitivity in persons who have had no previous contact with it. They found that males were more likely to show this latent sensitivity than females (male 6.05% : female 3.7%). These findings are only true of adults because they failed to find a single child who gave a positive skin response to penicillin, unless the child had previously received treatment with it. These findings can be correlated with the known freedom from epidermophyte infection of children and the notorious liability of the adult male to develop tinea of the feet and groins. The adult female is less likely than the male to become infected with these dermatophytes, and this would seem to account for the lower incidence of primary sensitivity to penicillin in women. It is well known, of course, that the wife rarely acquires her husband's tinea and that tinea cruris is far more frequent in boy's schools. It has been suggested by Rothman of Chicago that this liability of the male to develop these infections after puberty is probably due to the apocrine secretion of the male possessing some factor which encourages the growth of the fungi. The reader will recall that the apocrine glands are not active before puberty.

There does not appear to be a common antigen between *crystalline* penicillin and trichophytin, but there does seem to be a very closely related antigen between streptomycin and penicillin, so that the possibility of cross-sensitisation arises when a patient has been sensitised to either of these antibiotics.

Fungus infections would seem to be commoner in the United States than in Britain, because of the warmer climate, therefore it may be necessary to modify Peck's conclusions in the light of any studies which may be carried out here.

CLINICAL PICTURE.

The clinical features of the average case of primary contact dermatitis are remarkably constant, and depend less upon the chemical nature of the sensitising agent, than upon the biochemical make-up of the patient. Naturally, the dose applied to the skin is important, and sensitisation is more likely to develop in a given period if a 2% penicillin cream is applied than if the cream contains only ½%. The base or vehicle in which the medicament is applied will determine both the time taken for the drug to reach the living (prickle) cells, and the concentration in which it reaches them. Thus, penicillin compounded in oily bases tend to mix with sebum and to penetrate the horny layer more rapidly and effectively than watery preparations. This is due to the physico-chemical similarity of oily substances to the lipids in the horny layer and sebum. Should the vehicle contain surface active agents, e.g., sodium lauryl sulphate, propylene glycol or triethanolamine, then the effective penetration is greater than it would be when the penicillin is made up in an inert hydrocarbon such as vaseline.

From the foregoing we may conclude, *ceteris baribus*, that one is more likely to become sensitised if the penicillin is applied in a high concentration in an oily vehicle containing one or more surface active agents. Penicillin applied in a watery lotion, or blown on to the skin as a powder is the least likely (but unfortunately, also therapeutically, the least effective mode of application) to produce sensitivity.

It should always be remembered that any of the ingredients in an external application may produce a sensitisation dermatitis, but this source of sensitisation has been invoked too frequently by many authors in their endeavours to exonerate the true culprit—penicillin.

Primary irritants, also, produce a dermatitis which is often indistinguishable from a contact dermatitis in its early stages. Such a dermatitis may be produced when too high a concentration of the drug is incorporated in the application. This is sometimes seen with 1–2% concentrations of tyrothricin, but rarely when this antibiotic is used in strengths of 1 in 1,000. (It should be noted that tyrothricin is nearly as effective in this strength as it is at the higher concentrations). Sensitisation dermatitis is easily recognised when the eruption *begins to appear at sites remote from those at which the medicament is being* applied. Areas in which the skin is thin are more likely to show the effects of sensitisation, and for that reason the skin of the eyelids and prepuce are particularly vulnerable, whilst thick-skinned regions, such as the soles and palms, are relatively resistant. Any agent which tends to have a keratolytic action, or to possess de-greasing properties will assist in the production of a sensitisation dermatitis, by depriving the skin of some of its natural barriers against chemical attack. Negroes, by virtue of their thicker horny layers, are less likely to become sensitised to an external agent. This means that they are better risks than the white races in tasks involving high skin hazards.

A Typical Case of Penicillin Dermatitis.

The patient is usually a man and he may have sustained a trivial cut whilst shaving. The small wound has become infected, and with subsequent shaving, two, we will assume, there has been some spread of this infection. After a day or he reports to his doctor with a fairly typical impetigo. His doctor prescribes, penicillin cream, which our hypothetical patient dutifully applies twice daily and, at first, the rash begins to clear. However, after the fifth day or so, his face begins to itch and he notices that the rash has extended a little. Next day the irritation is more intense and there has been further spread of the rash. He deals with it by applying the penicillin more often and more of it ! Why not ? Isn't it the magic drug that he has read and heard so much about, and is it not quite harmless ? Vesicles now make their appearance and some bullæ are to be seen. His eyelids now become swollen, and he re-visits his doctor. His doctor misinterprets what he sees and gives him an intramuscular injection of several hundred thousand units of penicillin, which is followed soon after by an " explosive " eruption involving the face, hands, feet and perhaps the groins. This eruption may be mixed in character, with itching papules and vesicles predominating.

He is then sent to hospital where he may have to be admitted, and may stay there for many weeks or months.

Treatment.

Treatment consists in immediate removal of the application causing the eruption, and prohibition of its further use. The patient may have to be nursed in bed, particularly when the eruption is extensive, or if it has become secondarily infected with another bacterial strain or even a different species. He should be given full doses of one of the anti-histamine drugs. Phenergan 25 mgm. t.d.s. would be the first choice. This should be sufficient to control the irritation. Only bland lotions should be applied to the affected skin, but should sepsis be present it may be necessary to apply a lotion containing tyrothricin. It is always good practice in these cases to identify the bacteriological flora, and to determine the sensitivity of the infecting organisms to the other antibiotics and chemotherapeutic agents. These should be administered systemically, if they are required.

The average case, if treated early and if it is not too heavily infected usually responds quickly to treatment on the above lines, but a significant proportion of these cases, and nearly all of those with generalised exfoliative dermatitis, take months to recover, and a few deaths have been reported. Recently I have had a fatal case of exfoliative dermatitis due to penicillin, under my care at Orpington Hospital. The patient succumbed to broncho-pneumonia after an illness lasting over six months.

DESENSITISATION.

Desensitisation of patients who have developed penicillin sensitivity is tedious and hazardous, and I have only achieved success once in a small series of attempts. The same is true for sulphonamide dermatitis, and the hazards associated with desensitisation are well illustrated by the following account of an attempt at desensitising an airman who had been sensitised to sulphapyridine in the course of treatment for impetigo. At that time, I think it was the summer of 1943, army dermatologists had reported successful desensitisation to the sulphonamides, by the oral administration of the drug. The initial dose was small, and was increased progressively until the patient was able to take the full single therapeutic dose. If any reaction occurred, the dose was reduced and not increased for some time, and then only by a minute fraction. In this way it was hoped that the majority of cases would be desensitised and thus enabled to take the drugs by mouth. This was an important consideration at the time, because penicillin was still very scarce and the sulphonamides were the surgeon's first line of defence should the individual become a battle casualty. The first two or three cases were quickly desensitised in this manner and then came disappointment and near-disaster. A patient, who was fully recovered from his original sulphonamide dermatitis, was given 1 mgm. of sulphapyridine by mouth at midday. Shortly after 1.0 p.m. I was called to see him because he was shivering and had a temperature of about 103°F. There was a faint generalised erythema. He had several rigors in the next few hours, with temperatures of over 105°F. and he had a bright scarlet eruption all over his body. Later that evening papules and vesicles began to appear at all the sites of his original sulphonamide eruption. The scarlatiniform rash faded in the course of the next 48 hours or so, and his fever subsided at the same time. The eczematous eruption at the sites mentioned, however, took about six weeks to clear, and, following this experience, I abandoned desensitisation "for the duration!"

Recently, we have used this oral desensitisation method for penicillin sensitivity in nurses at Guy's; so far we have had no such set-back.

DURATION OF PENICILLIN SENSITIVITY.

This is a difficult problem, and no one can give a definite answer. From personal experience, I can recall several cases where the sensitivity has endured for well over a year, with both penicillin and the sulphonamides, and it is notorious that sensitivity to arsenic and gold may be life-long.

STREPTOMYCIN.

Streptomycin is even more liable to produce sensitisation when applied to the skin than either penicillin or the sulphonamides. As it is particularly prone to give rise to an exfoliative dermatitis of wide extent, the consequences may be serious. Several nurses have become sensitised by allowing the antibiotic to drip from the syringe on to their hands when they prepare or administer the drug. Gloves should always be worn to avoid this risk.

Aureomycin.

Although there have been no cases of contact dermatitis due to this antibiotic to my knowledge, at Guy's, reports have appeared in the literature of such cases. French dermatologists condemn, in the strongest terms, its use as an external application, and in this condemnation one must concur. Sensitisation to a valuable therapeutic agent is too high a price to pay to clear up a minor skin infection.

Chloromycetin

This antibiotic is very expensive and therefore should not be used unless there are very concrete reasons for doing so. It should never be applied locally because of the risk of sensitisation.

Neomycin and Terramycin.

See remarks above re streptomycin and aureomycin.

FAILURE OF ANTIBIOTIC THERAPY THROUGH BACTERIAL RESISTANCE.

A discussion of this important subject is outside the scope of this article, but the reader is reminded of its importance. Penicillin resistant strains of staphylococci are more frequently met with now-a-days, and it may be necessary to determine the sensitivity of the organisms to all of the available antibiotics, in every case with the extensive skin infection. It has become noticeable, too, that *pyocyaneus* and *proteus* are more frequently recovered from skin lesions, than was the rule in the days before penicillin. So little is known of skin ecology, that one is unable to predict what the future " normal " flora of the skin is likely to be after another decade of intensive use of these and other (as yet unknown) antibiotics.

It should always be remembered that there is little or no reason why any of these antibiotics, except tyrothricin, should replace the traditional external antiseptic applications. Their use should be reserved for extensive and serious skin lesions, and *they should always be given systemically.*

CONCLUSION.

This brief account has been written to draw attention to the risk and dangers of skin sensitisation following external application of the antibiotics and chemotherapeutic agents. It is also written to draw attention to the fact that these drugs are no panacea for skin infections, and may be quite ineffective or inferior to the " old fashioned " remedy, suchas Ung. Hydrag. Ammon. dil. ; and finally, to remind the reader that some of these drugs are still scarce, and all of them are expensive, some, indeed, very costly.

About the Park

IT was with great pleasure that we observed the return to Guy's for a few days' visit last week of Miss MacManus. Home again from a visit to Persia, she is now living in Ireland.

The surgical visitor from Johns Hopkins this year is Dr. W. W. Scott, Director of the Brady Institute of Urology at the Johns Hopkins. He will be in England from June 2nd to July 7th and will be operating here, giving clinical lectures, rounds, demonstrations and out-patient sessions. Guy's has come to look forward very much to the exchange visits with Johns Hopkins and Dr. Scott is assured of a most cordial welcome on account of his predecessors on these visits as well as on his own.

The last two weeks have seen the beginning of the " propping up " of Guy's. From the Park the south aspect of the Surgical block may now be seen supported by numerous iron girders. They are unsightly, but the plumb line attached to the guttering near the roof showed to the most casual observer how much the walls had begun to lean outwards.

Students, especially those who have been disappointed at not obtaining tickets for the Residents' Ball, will be interested to know that at the meeting of the Clubs' Union Council held last Friday, it was decided to go ahead with arrangements for a Students' Ball to be held during next winter. The Ball will be held at one of the big London Hotels and will be on a scale comparable with the Residents' Ball.

We congratulate the Squash Club on an extraordinarily successful season. To have won 19 out of 24 matches is a great feat. The Hospital was represented throughout the season by P. L. Pickett, M. A. C. Lyon, D. E. Blake, D. R. Pugh and J. V. Parson.

On another page will be found an announcement concerning the Art Exhibition which will open on June 4th in the Gordon Museum. This is an enterprise well worth visiting and we sincerely hope that it will be as well attended as the last Art Exhibition.

With the approach of the summer users of Honor Oak Park Sports Ground will be glad to know that this year Mr. Kirby will have to assist him the full-time services of an assistant groundsman recently engaged by the Clubs' Union. A new tractor, to replace the completely obsolete vehicle in use, has been purchased and these innovations should make for really good conditions.

Correspondence

Residents' Ball

SIR,—We should like to express our regret that so many people at Guy's have been refused tickets for the Residents' Ball. That some should be disappointed was inevitable, as the space available is not sufficient to accommodate all.

The choice of whom to refuse is always hard, and one must have some principle upon which to work. Our view was that the Ball serves as an opportunity for old Guy's men to renew past acquaintances. It would seem, therefore, unfortunate to have to refuse them tickets, and they have, accordingly, been given priority over those still here. We regret that this has been the occasion of disappointment to others, but hope that they will understand our difficulties, and at the same time remember that they may, when they have left the hospital, appreciate similar consideration.

Yours, etc.,
A. W. R. WILLIAMSON,
President of the Residents.
M. C. GILBERT,
Secretary to the Ball Committee.

SIR,—Many final year students and newly qualified Guy's men have been disappointed to have their applications for tickets to the Residents' Ball refused. The Ball has been widely advertised throughout the Hospital and Medical School, and the explanation offered, that this function is mainly a reunion for old Guy's men comes as a surprise, since this has not been the case in the past. Are we, then, to assume that the Residents' Ball is in future to be advertised purely as a function for old Guy's men ?

Some people, furthermore, had their applications refused at an inconveniently late hour, by which time many of their partners had committed themselves to considerable expense in preparing for the Ball.

In previous years, senior students have been welcomed and we feel that had the Ball been less well subscribed the committee would have been only too willing to accept their cheques !

We fear that a rather Pharisaic attitude on the part of the Ball Committee is at least partly responsible for the total exclusion of students, and we suggest that in future years a proportion of the tickets should be reserved for senior students, or provision made for larger numbers.

Yours, etc.,
G. A. E. BAKER.
J. G. L. BELLIS.
R. D. P. DRUITT.
W. G. DAVIES.
J. W. GOODFELLOW.
P. M. J. O'BRIEN.
A. R. PHILLIPS.
S. H. RICHARDS.
E. D. SONNENFELD.
D. J. STOKER.
T. G. THOMAS.
W. M. E. TWEED.

Guy's Hospital Reports

SIR,—This year the Guy's Hospital Reports reaches its one hundredth volume ; the centenary of the first volume fell in 1936, the difference being due to some gaps in publication. The Guy's Hospital Reports Committee feels that the Reports should be read as widely as possible by all Guy's men old and new. In an attempt to encourage more people to become subscribers the Committee has taken the step of reducing the annual subscription to one guinea to Guy's men ; students and house officers have the even more favourable rate of half a guinea a year. This reduction will result in a heavy financial loss unless a sufficient number of people become subscribers and it is hoped that many people will do so.

All communications should be addressed to The Secretary, Wills Library, Guy's Hospital, S.E.1.

Yours, etc.,
R. C. BROCK,
Editor.
W. N. MANN,
Associate Editor.

Guy's Youth Hostel Group

SIR,—I would be grateful for the hospitality of your columns in order to give publicity to the activities of the Y.H.A. at Guy's.

Two tours are being organised this summer. One is going to France (July 14th–28th) and the other to Scotland (August 4th–17th). The French trip will include five days in a University Hostel in Paris and the rest of the time will be spent in Youth Hostels travelling south. The Scottish tour will start in Glasgow, proceed north and spend amongst other things, four days on the Isle of Skye.

Youth hostelling probably needs no introduction to most people at Guy's ; it is the cheapest way of spending a holiday and the way which leaves you more free to do just as you fancy than any other. The Guy's Group has the reputation of doing away even with the expense of travelling, or at least to reduce it to a minimum.

The membership of the Group consists of anybody in the Hospital or their friends, male and female, but our members have decreased recently as the most active members have qualified. Everybody will be welcome, also to our monthly weekend trips. I shall be glad to hear from anybody interested in any of our activities.

Yours, etc.,
EDWARD HERZ,
Honorary Secretary.

ACADEMIC

May		
		Exhibition. Surgical Department. " Burns."
7th	12.00.	Mr. F. N. Doubleday. Dental Clinical Lecture. " Local Anæsthesia."
	1 00.	Dr. Baker. Clinical Lecture. The Nervous Elements in Cardio-Vascular Disease—continued.
	5.00.	Surgical Department. Film. " Operation of Radical Mastectomy." Clinical Theatre.
8th	1.00.	Dr Bishop. Clinical Lecture. " The Management of Thyrotoxicosis."
9th	4.45.	Science Club. Professor R. Knox. " Bacterial Variation and Chemotherapy." Staff Common Room. (Tea 4.30.).
10th	1.00.	Professor Rushton. Clinical Lecture. Abnormal Dentition.
	4.30.	X-Ray Meeting. Gordon Museum.
17th	4.30.	X-Ray Meeting. Gordon Museum.
18th	1.00.	Dr Holling Clinical Lecture " The Pulmonary Circulation."
	2.15.	*Medical Department. Combined Round. Preclinical Classroom.*
19th	10.00.	Mr. A. W. Kendall, King's College Hospital. Surgical Departmental Round. Clinical Theatre.
21st	1.00.	Mr. Cann. Clinical Lecture.
22nd	12.00.	Mr. R. O. Holland. " The Tongue." Dental Theatre.

The subject of Dr. Mann's Clinical Lecture on Friday next will be " Abdominal Pain " and not " Hodgkin's Disease."

OTHER ENGAGEMENTS

7th	12.30.	Founder's Day Service. Guy's Chapel. Address by the Rt. Rev. The Lord Bishop of Southwark.
9th	Athletics *v.* Kent A.C. *v.* Westminster Hospital. (Ladywell.)	
12th	Athletics *v.* Imperial College *v.* St. Bart.'s Hospital *v.* Middlesex and St. Mary's Hospitals. (Harlington.)	
16th	Athletics "B " Team *v.* Dulwich College. (Dulwich.)	
15th 17th 19th	University of London Athletic Championships. (Motspur Park.)	

Reviews

Introduction to Pathology. By PROF. G. PAYLING WRIGHT. Longmans, Green. *Price* 30*s.*

For all the declared paper shortage at the present time a multitude of books are published during the course of each year, the majority of them to be read, discarded and forgotten forthwith. Others, procured in the first place as a means to an end, are retained rather longer and are pored over meanwhile. Such are the textbooks of medicine and its various allied subjects. Once the examination is achieved they find their way to the second-hand booksellers or, at least, to the most inaccessible corners of the book-shelves. All the more wonder then, when a work of great merit does appear, that though it may not in fact achieve real permanence, it certainly deserves to do so.

Professor Payling Wright, incorporating his well-known and esteemed lectures on pathology into a delightfully written and well illustrated book, has presented us with a work of outstanding value. Those who pore over the written word with the prospect of Queen Square in mind may not find it of very great assistance. Those—and we think and hope they are the larger proportion—who read for illumination, enlightenment and enjoyment, will regard this as in the forefront " of Kings' Treasuries." This, indeed, is a classic and should be read at least by every undergraduate student, for the author has afforded us, to use Ruskin's words, " the piece of true knowledge, or sight, which his share of the sunshine and earth has permitted him to seize."

G.

A Textbook of the Practice of Medicine. Edited by FREDERICK W. PRICE. 8th Edition. Oxford. *Price* 45*s.*

With knowledge expanding in the fashion of an algebraic progression one is tempted to doubt whether it is a reasonable proposition at all even to attempt the compilation of a comprehensive textbook of medicine. Yet for the practitioner and advanced student it is very comforting to think that within one sizeable volume there is a ready reference to almost any question that might arise. For nearly thirty years " Price " has served admirably in this respect.

This new edition represents a further attempt to keep an honoured and recognised work up-to-date. The trouble is that although symptoms remain virtually unchanged and ideas on ætiology undergo only slight amendment from time to time, opinions regarding treatment are changing almost overnight. So far as this new issue of " Price " is concerned the accounts it gives under these first two headings remain of a very high order. In treatment, however, it tends, if not to fail dismally, at least to cling to a well-nigh mediæval conservatism. The task of achieving anything like perfection is, in fact, practically impossible and we are coming to believe that although " Price " may remain as a very good example of its kind it should be remodelled in future, concerning itself primarily with ætiology and symptoms and leaving treatment to be dealt with in a series of annual supplements.

Turning to make-up, the eighth edition is but mediocre; for the size is awkward and the layout undistinguished. The paper, too, is poor, pages 1057 to 1120 merely giving us a glimpse of the better standard that might have been achieved.

The Teaching of Parentcraft. By L. G. HOUSDEN. Methuen. *Price* 7*s.* 6*d.*

It would ring the bells of Heaven a pretty good peal if Dr. Housden's schemes for teaching parentcraft were put into full operation. Certainly all teachers, nurses and doctors might well read this short exposition with profit. The ideas expounded are for the greater part excellent and practical and if the flavour is mildly old fashioned, that is no harm. A knowledge of psychoanalytic ideas of motivation and behaviour is the most valuable aid to managing school children, a teacher told me, but they might alarm some people who do not appreciate the wild and sinister world in which the child's mind moves.

This is a short book and some sentences tantalise me. I am tempted to ask if Dr. Housden could have space for some thousand words in expansion of this :—

" If (crying in the newly born baby is) excessive, it must be stopped by the good management which is part of parentcraft, not by spoiling, by too much nursing or by use of a dummy " (p. 32).

I do warmly welcome Dr. Housden's recommendations that fathers should be involved, that a mother-to-be should be told what is going to happen during the process of delivery, that mothering the baby is valuable as well as enjoyable, that it is of great importance to convey to the child that he is wanted.

The danger for the teaching of parentcraft may be that it may too often be done by well-meaning people convinced of their own success and desirous of talking down to the less gifted. It would be much better done by modest people reading this book and passing on something of Dr. Housden's good sense.

R.C.M.

Guy's Theatre Club

" THE CONSTANT WIFE "
by W. Somerset Maugham
will be presented in the
PHYSIOLOGY THEATRE
on

Monday,	21st	May,	1951,	at 7.30 p.m.
Tuesday,	22nd	,,	,,	,, ,,
Wednesday,	23rd	,,	,,	,, 6.15 p.m.
Thursday,	24th	,,	,,	,, 7.30 p.m.
Friday,	25th	,,	,,	,, ,,
Saturday,	26th	,,	,,	,, 2.30 p.m. 8.00 p.m.

Seats may be reserved by application to the Hon. Secretary. Admission is free but it is hoped to defray expenses by a collection which will be made during each performance.

The Club, however, will be pleased to receive subscriptions beforehand. Cheques should be made payable to Guy's Theatre Club.

Sport

CHESS CLUB

A Chess Club has been constituted at Guy's, with membership open to Staff and Students. Initially, activities will be restricted to a ladder, which will be kept in the students' reading room. It is hoped that meetings and matches will be arranged in the future.

Those wishing to become members, which entitles them to have their names placed on the ladder, should contact the Hon. Secretary, Mr. J. A. Cox, by letter in the rack.

Chess sets will be provided for club members in the reading room, and the procedure for challenging will be affixed to the ladder.

SQUASH

The Club have had their most successful season since the war having played 24 matches winning 19 and losing 5.

In the Inter-Hospitals Cup we were narrowly defeated by St. Mary's by three matches to two. We won the third division of the Cumberland Cup League and so have gained promotion to he second division.

ASSOCIATION FOOTBALL

Results of Southern Amateur League Matches

Guy's 2nd XI *v.* Old Latymerians 2nd XI
26th March, 1951
Away. Result—Won 3—2
(Fearn, Shea, Burns)

Guy's 2nd XI *v.* Cuaco 2nd XI
31st March, 1951
Away. Result—Won 4—3
(Burns 3, Allan (Pen.)

Guy's 2nd XI *v.* Ibis 2nd XI
4th April, 1951
Home. Result—Won 3—2
(Watmore 2, Burns)

Guy's 2nd XI *v.* Old Westminster Citizens 2nd XI
7th April, 1951
Home. Result—Lost 1—6
(Burns)

Guy's 2nd XI *v.* Cuaco 2nd XI
14th April, 1951
Home. Result—Lost 0—1

Hospital Information, etc.

APPOINTMENTS VACANT

Guy's Hospital and Medical School

Applications are invited for the following Junior Staff appointments for the session, 1951–52 :—

Medical Registrars	2
Junior Medical Registrars	3
Junior Assistant to the Director of the Department of Medicine	1
Surgical Registrars	4
Junior Assistant to the Director of the Department of Surgery	1
Obstetric Registrar	1
Genito-Urinary Registrar	1
Orthopædic Registrar	1
Chief Assistant to the Department of Anæsthetics	1
Anæsthetic Registrar	1
Hæmatological Registrar..	1
Neurosurgical Registrar (from 16.1.52)	1
Chief Assistant in the Neurological Department	1
Neurological Registrar	1
Chief Assistant in the Department of Psychological Medicine (P/T) ..	1
Registrar in the Department of Psychological Medicine	1
Registrars in the Department of Psychological Medicine (Part-Time) ..	5
B.M.R. and Endocrine Registrar (P/T)	1
Radiotherapy Registrar	1
Assistant in the Department of Diagnostic Radiology	1
Chief Assistant in the Department of Diagnostic Radiology (from 1.1.52)	1
Registrar in the Department of Diagnostic Radiology	1
Registrar to the Physiotherapy Department (one from 1.12.51)	2
Dermatological Registrar	1
Ophthalmic Registrars (P/T)	4
Registrars to the V.D. Department (1–Female Annexe, 1–Male Annexe)	2
Tutor in charge of the preliminary clinical period class	1
Chief Assistant in the Department of Clinical Pathology	1
Assistant Clinical Pathologists	3
Assistant Clinical Pathologist (Evelina)	1
Assistant Lecturer in Physics Department	1
Junior Lecturers in Anatomy Department	4
Junior Lecturer in Anatomy Department (P/T)	1
Junior Lecturers in Physiology Department	1
Junior Lecturer and Gull Student in Department of Morbid Anatomy and Histology	1
Junior Lecturer in Department of Morbid Anatomy and Histology	1
Junior Lecturers in Bacteriology Department	2
Junior Lecturers in Department of Chemical Pathology	2
Assistant to the Director of the Student Health Service	1

Forms of application obtainable from the Medical School Office and should be lodged with the Dean not later than **16th May, 1951.**

THE BETHLEM ROYAL HOSPITAL AND THE MAUDSLEY HOSPITAL

Applications are invited for the appointment of Part Time **Consultant in Neuro-radiology.** The main duty will be to take charge of this speciality at the hospitals named but the person appointed will be expected to undertake some general radiological work. The appointment will be for six sessions a week with the possibility of extension to eight sessions a week in about a year's time, and the salary and conditions of service will be in accordance with the agreed terms and conditions for hospital medical and dental staffs. The appointment will be subject to the National Health Service (Superannuation) Regulations, 1950.

Applications, stating date of birth and giving full details of qualifications and experience and the names and addresses of three referees, should be made, in writing, to the Superintendent, Guy's Hospital, London Bridge, S.E.1, so as to reach him not later than **23rd May, 1951.** Canvassing will disqualify but applicants may visit the hospitals by arrangement with the Superintendent.

SHERLOCK HOLMES
and
DR. WATSON

Sherlock Holmes and Dr. Watson—a Medical Digression—by Dr. Maurice Campbell, now available in book form from the *Gazette* Office, price Two Shillings each.

PASS LIST

CONJOINT BOARD

L.R.C.P., M.R.C.S.

March, 1951

Pharmacology

Ann Booth
J. K. Blackwell
D. V. Duckworth
P. N. A. Holden
P. E. Kapff
D. A. F. McGill
Joan H. Montague
I. K. Nasr
A. J. Smith
Dorothy J. Whitney
D. C. Wilkins

Elementary Biology

A. R. Grice
R. C. Moyse
M. F. H. Willis

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.

First Examination

March, 1951

Anatomy and Physiology

W. F. Airey
A. J. Bowman
B. T. Davies
P. Davies
V. C. Evered
A. D. Forman
K. M. Frew
W. Goriah
D. A. Hopkins
J. M. Irwin
E. O. James
J. C. Kingston
S. C. Lubbock
J. Metcalf
T. A. J. Ogunbiyi
A. N. Pollock
Dorothea Street
C. J. Wilkinson
J. F. H. Young

Special Anatomy and Physiology

W. F. Airey
W. A. B. Cahill
B. T. Davies
P. Davies
V. C. Evered
J. M. Irwin
D. M. Lipington
S. C. Lubbock
R. Ebsworth Snow
G. A. Thomas
C. J. Wilkinson
J. F. H. Young

UNIVERSITY OF OXFORD

Hilary Term, 1951

General Pathology and Bacteriology

B. Pigott

Forensic Medicine and Public Health

W. T. Barrett
C. F. Bolton
J. A. Smith

Special and Clinical Pathology

W. T. Barrett
C. F. Bolton
J. A. Smith

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
March, 1951

Surgery
*A. Ross

Medicine
M. M. Levene

UNIVERSITY OF LONDON

D.Sc.

C. B. Allsopp

Academic Postgraduate Diploma in Medical Radiology (Therapy)

March, 1951

K. A. Newton

Special Second Examination for Medical Degrees
(For internal students)
March, 1951

Barbara A. M. Allen
G. H. Anderson
J. B. Anderson
J. K. Anderson
Jacqueline E. Banbury
V. H. Bartley
Audrey J. Belsham
A. Berry
C. Bishop
P. D. Bowen
Patricia M. Boyd
A. M. Brown
D. V. Burke
Marian A. Burnes
C. D. Chilvers
D. V. Duckworth
R. W. Edmonds
G. E. Fulford
E. R. Gibbons
J. F. Gill
G. Gover
A. C Graham
B. P. Gregory
D. J. Hudson
H. C. F. Hudson
J. G. P. Hunt
P. Jenkins
R. G. Jones
D. W. S. Klee
P. Konfortion
N. A. G. Leadbeater
D. C. Linahan
D. B. Longmore
K. L. Lowings
P. R. Lyon
H. R. B. McCauley
A. G. Malleson
O. Morton
Sheila M. Mullally
T. W. Nicholson
E. G. Palmer
A. J. Pearson
C. W. Pook
M. W. Potts
Joan M. Sadler
O. H. Shaheen
D. L. Smithson
P. S. Stack
J. A. Stevens
L. Stimmler
E. E. D. Tomlin
D. H. Williams
J. H. P. Willis
R. D. Wilson
C. F. A. Younger

UNIVERSITY OF LONDON

British Postgraduate Medical Federation

Professor W. E. Herbert (Dental Surgery) has been appointed representative of the University on the committee of management of the institute of the British Postgraduate Medical Federation.

CONJOINT BOARD

L.R.C.P., M.R.C.S.

Final Examination
April, 1951

Pathology

E. J. Elkington
T. G. R. Jones
W. G. Lewis
N. M. Midgley
*J. O. Ojukwu
T. G. Pugh
E. J. Rolls
W. W. Thompson
A. H. Walker
R. S. Wells
*P. A. Zorab

Medicine

*G. A. E. Baker
*T. G. L. Bellis
*B. I. Copeland
*M. J. Craft
*D. M. Devane
E. J. Elkington
*J. C. Gazet
E. T. Johns
G. M. Karpusheff
M. M. Levene
M. M. Lubel
J. M. Medlock
*P. M. J. O'Brien
*J. O. Ojukwu
*J. N. Pachmayr
*S. A. C. Paget
*J. Palmer
*P. L. Pelmear
*S. H. Richards
*K. A. E. Spence
*A. G. Spooner
*W. M. E. Tweed
*R. A. J. Williams
J. F. Woodford
*P. A. Zorab

Surgery

*G. A. E. Baker
*A. J. Bridge
*N. P. Bronsdon
*A. C. Campbell
*D. J. Cliffe
*B. I. Copeland
*A. Ferrari
*J. W. Goodfellow
*P. D. Harvey
*J. C. Jelleyman
*T. D. Kellaway
*E. J. Masters
N. M. Midgley
*A. R. Phillips
*W. J. Pryn
*D. L. Rugg-Easey
*G. C. Saint
*M. A. Sorefan
*K. A. E. Spence
*A. G. Spooner
T. G. Thomas

Midwifery

*K. B. Bender
J. W. Comper
T. G. R. Jones
*P. M. J. O'Brien
*S. H. Richards
*D. L. Rugg-Easey
E. M. Sycamore
A. H. Walker

* Have completed the examination.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.

Second Examination
April, 1951

F. L. Brown
H. Chatfield
D. L. H. Clark
J. G. Davies
A. d'A. Fearn
S L. Hewitt
Diana M. E. Jennings
R. Park
A. B. Grantley Smith
F. H. Trist
A. M. Williams
J. F. Wylie

ROYAL COLLEGE OF SURGEONS OF ENGLAND

A. H. Harkness has been elected to the Fellowship of the College without examination as being Medical Practitioner of at least 20 years' standing.

CONJOINT BOARD

Diploma in Tropical Medicine

D. W. F. Charlton

Diploma in Child Health

J. S. Ebsworth
J. D. Reinhold

ROYAL COLLEGE OF PHYSICIANS OF LONDON

M.R.C.P.

April, 1951

J. H. Baylis
H. Greenburgh

MARRIAGE

WALKER—MIVAL.—On March 26th, 1951, Thomas Kenneth Walker, L.D.S., R.C.S. Eng., to Marjorie Edna Mival, at St. Thomas' Parish Church, Rhyl.

BIRTHS

ALLEN.—On April 27th, 1951, at Colchester Private Nursing Home, to Judy (née Collins), wife of R. A. Allen, M.B., B.S., of Castle Hedingham, Essex—a daughter.

BARKWORTH.—On April 28th, to Beryl (née Wright) wife of Dr. F. B. S. Barkworth of Oakhampstead, Dittons Road, Eastbourne, God's precious gift of a brother for Paul and John (Peter Mark Reginald).

BUCK.—On April 19th, 1951, at Mansfield Nursing Home, to Marguerite (née Edwards) wife of H. Anthony Buck, M.R.C.S., L.R.C.P., D.A. — a daughter (Gillian Patience).

GOULDER.—On April 8th, 1951, at Hitchin, Herts., to Margaret Mary (née Oliver), wife of R. V. H. Goulder, M.B., B.S.—twins—a brother and sister for Nicholas, Meg and Ann.

OWEN —On March 25th, 1951, at Liverpool Maternity Hospital, to Margaret (née Brown), wife of Robert Owen, M.B., B.S.—a daughter (Gwyneth Anne).

Eds. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

LECTURING is a form of instruction which has great advantages and serious limitations. It is our opinion that in recent years the latter have tended to be overlooked.

In the earlier years of medical study it is necessary to impart many fundamental scientific facts to students. Without these he can hardly be brought into contact with the world of science, nor will he be able to learn later on to reason for himself. Practical and personal experience at this stage are less important than they become later on, and at this stage therefore lectures are a valuable and vital part of the curriculum. During study for the Second Examination for Medical Degrees lecturing still has a prominent and useful part to play, though in our opinion it becomes less important. True, the presentation of arguments and the process of deduction from experimental evidence are aspects of teaching which, in competent hands, lend themselves well to the lecture room. A tat this stage students are constantly encouraged to argue with their friends, to use their own powers of reason and not to rely solely on the facts presented to them during lectures. One of our most influential teachers is fond of reminding his class that a piece of chalk, a blackboard and a sceptical friend are a most valuable aid to learning.

As the student passes from the preclinical to the clinical stage in his studies the emphasis changes, or should change, from theoretical and academic to practical training. Time and again it is emphasised by the most competent teachers in the hospital that the wards, the out-patient departments, the surgery, the museum, are the best places in which to learn medicine, and many are the warnings given against excessive time spending in the library and in lectures. The truth of this advice is undoubted but it comes as something of a surprise to the student that he is compelled to attend such a vast number of lectures and not unnaturally wonders which he ought to do—follow the advice of his teachers or obey the rules of the University. The lectures arranged for him may indeed be arranged for his benefit, but they are on so many subjects and the series are often so long that in the end they become a barrier to clinical learning.

It seems to us that there is a very real case for the reduction of the total number of lectures at which students ought to attend. Furthermore, it should be possible to effect this with no great rearrangement of the curriculum. We feel that some of the more lengthy series of lectures for fourth, fifth and sixth year students might with advantage be shortened, that some of the courses of lectures might be abolished if they are overlapped in their scope by similar lectures, and we cannot help wondering if anything would make for a rise in the standard of lecturing so efficiently as the voluntary attendance of students at lectures.

Lecturing, like other forms of teaching, ought from time to time to come under review. At present the most satisfactory and certainly the best attended courses of lectures are those in which one lecturer limits himself to a number of lectures and gives, as well as detailed information, a perspective on his subject. The least satisfactory courses seem to be those in which the course is given by many lecturers and in which no perspective can be obtained. Clinical lectures are entirely different, each being an address complete in itself, and these are perhaps the one lecture above all others which are almost uniformly valuable.

"The Mayo Clinic and the Mayo Foundation"

By HOWARD GRAY, M.D.

A lecture delivered at Guy's Hospital Medical School on Tuesday, April 24th, 1951.

SIR HENEAGE OGILVIE, in introducing the speaker, said that there was nobody in the civilised world who did not know of the Mayo Clinic. Twenty years ago the Mayo Clinic meant chiefly Charles and William Mayo and surgeons from all over the world went there for instruction. But with the disappearance of the founders, instead of losing lustre, the Clinic had gone on from strength to strength. It had also found people of the most outstanding ability to step into the shoes of its founders and among them there was nobody who stood higher in esteem than their visitor of that morning, Howard Gray, who was one of the seniors in the Surgical Group.

Dr. Howard Gray said that he was very happy to talk about the Mayo Clinic and the Mayo Foundation, but he thought his audience might first be interested in some description and illustration of the part of the country in which the Mayo Clinic was situated. On his journey across in the plane, an officer asked him what part of the States he came from. He replied that he came from Minnesota and when asked what part of Minnesota, he replied, " A little town ninety miles from the twin cities of Minneapolis and St. Paul—a town named Rochester." " Oh," said the officer, " is that anywhere near Cleveland ? " In fact they were just about as far beyond Chicago as Cleveland was on the other side. Many people had only a hazy notion of distances in the United States. Actually Rochester was about 350 miles north-west of Chicago. The State of Minnesota was one of the northernmost in America. It had a very changeable climate and varying temperature. When he left home in the beginning of March the thermometer stood at 40 degrees below zero. Yet it was a very dry climate. In the summer the temperature might be up to the 80's or even the 90's. They had two seasons in Minnesota—winter and the 4th of July !

Dr. Gray went on to say how thoroughly he had enjoyed his visit to this country. It was fourteen years since his previous visit, and on this occasion he had already done 1,400 miles on British roads. Everywhere he had thoroughly enjoyed the lovely countryside and the kindness of the people.

He proceeded to show a few Kodachrome slides illustrating this part of Minnesota. They had there a large Scandinavian population and more Johanssens and Stefanssons than they had Browns or even Grays. Corn was one of their very important crops, although Minnesota was not the major state for corn production. He showed views of farming in Minnesota and also illustrations of the delightful country. The town of Rochester itself, of which he first showed some aerial views, had a permanent population of only 30,000, but it had a cosmopolitan atmosphere, because be believed there were 25 hotels and most of the down-town houseowners supplemented their income by taking in boarders.

Coming to the Clinic building, he first showed the main entrance. This consisted of two solid bronze doors which were never closed night or day. Within his recollection they were closed only on one occasion and that was when the late President Roosevelt came to Rochester at the time when his son was being operated on at the Clinic. The gates had then to be closed for 24 hours beforehand and the whole building inspected by the Secret Service. He showed also photographs of the new building under construction. There would be a concourse as wide as that theatre connecting the new building and the old. The new building was a ten-storey structure with a foundation and supporting building which would take at least another eight floors. It was completely air-conditioned throughout. There would be 24 passenger elevators in the building. The present building completed in 1929 was designed for the accommodation of 85,000 cases a year at the end of a 25-year period. But that load was reached and passed in 1937, and last year 143,000 patients were registered. Therefore since 1937 they had been working with inadequate facilities. With the new building and the present staff they could take care of this enhanced load and do it much more conveniently and have more time to sit down and think things out a little.

He next showed a picture of the existing building in which the original partners worked. They had their office in a building which was a Masonic temple just round the corner from the present Clinic. Another noteworthy building was now Mayo Foundation House. It was William J. Mayo's home and was designed with the idea that one day it would be turned over to the Mayo Foundation for teaching purposes. This was done in 1937, about two years before W. J. Mayo died. In it is a lovely hall named for D. C. Balfour. The smaller lecture meetings were held there, including the meetings of the Surgical Society, the Clinical Society, the Laboratory Society and the various teaching seminars. It was used as much as any of the buildings of the Mayo group. It was situated on what was popularly called " Pill Hill."

He next showed a view of the Medical Sciences building, an addition to which had just been completed. In that building was carried out most of their work on aviation medicine. Practically all the small animal work was done there also. The large animal work was still done in the country. America had to face the opposition of the anti-vivisectionists, which was quite as serious there as it was here, and their Clinic was anxious not to do anything to antagonise those who might have feelings on the subject.

The Institute of Experimental Medicine was situated about three miles out in the country. St. Mary's Hospital, of which he showed an aerial view, was privately owned by a Catholic Order of Sisters—the Sisters of St. Francis. It was 100 per cent. their own hospital. The Mayo Foundation had no financial interest in it, and indeed had no financial interest in any hospital in Rochester. St. Mary's was originally a missionary project of that Order and it gradually grew so that since the war the Sisters had put 2½ million dollars worth of improvements into the hospital. The medical wing was completed in 1941. It was one of the best run hospitals in the country and was said to be the largest privately owned hospital in the world, consisting of 920 beds. It included a large nurses' home, a beautiful auditorium, a swimming pool, and separate wings for surgery, medicine and obstetrics. About 1,500 deliveries a year took place at this hospital.

He also showed another of the down-town hospitals of about 400 beds. The combined beds of the down-town hospitals were about equal in number to the beds of St. Mary's. Other hospitals were for specialised cases and were attended by proctologists, cardiologists, urologists, and so on.

Dr. Gray next showed portraits of the three Mayo's, William and Charles, and their father, Dr. W. W. Mayo. The father was in his 'nineties when he died, but the Mayo Clinic would never have come into existence had it not been for the two sons, who, however, always said, " Our father was responsible for this." Both William and Charles Mayo talked always of " My brother and I." That term, " My brother and I " had become almost legendary in the Mayo Clinic. There was erected a statue of William and Charles Mayo facing each other, and inscribed below it was the simple legend, " My brother and I."

Dr. William Mayo was a great organiser as well as a most capable surgeon and a dignified figure. Charles Mayo was a less impressive-looking man, but had something of a twinkle in his eye and a marvellous sense of humour. Both were beloved by everyone. William Mayo with the dignity that befitted the great man, had a nature which prevented him from mixing freely in society with a " Hail Fellow " manner. He often said of his brother, " I wish I could do that," meaning that he wished he could mix with people as Charles could do. Both of them were magnificent surgeons and the combination of the two, with their organising ability and their great public spirit, plus the fact that this Institution grew up at a time when surgery was receiving its greatest impetus, made the Mayo Clinic the famous Institution that it was. It was fortunate for the staff that the Institution settled down in this small town, for it meant that the members of the staff saw one another all the time, whereas in a large city there could not be the same *camaraderie*.

There were actually three organisations in the Mayo set-up—the Mayo Clinic, the Mayo Association, and the Mayo Foundation for Medical Education and Research. These were three separate organisations and yet they dovetailed in so many ways that they were inseparable. The Mayo Clinic was customarily thought of as the building which he had been showing them in the photographs, but actually it was a voluntary association of professional people banded together to practise medicine and surgery and the basic sciences. About 95 per cent. of the staff were Doctors of Medicine. It was really a voluntary association—not a partnership. In the United States a partnership was dissolved legally if something happened between the partners and the responsibility was equally divided between all the parties. He himself had no contract with the Mayo Clinic ; he could be " fired " at any time, and he could quit at any time, and he found it a very pleasant place in which to practice.

The Mayo Association was responsible for the financial part of the organisation. It was a non-profit Corporation and its Articles of Incorporation were almost identical in spirit with the bye-laws of the Foundation. This laid it down that the Mayo Association should be an establishment whose funds were to be used for the care of sick people, for medical education, and for research. The Mayo Association had a Governing Board of Fellows who, until lately, were entirely members of the staff, though just a few weeks ago there were appointed from outside three members representing the public. The relationship of the Mayo Association to the Mayo Clinic was a relationship of landlord and tenant. The latter paid certain sums of money every year for the use of the building and its equipment and for the right to practise medicine under the name of the Mayo Clinic. All this belonged to the Mayo Association. After deducting the staff salaries and the administration overheads every penny went into the Mayo Association. In some years this net profit might be a large sum ; in other years, owing to recession or other causes, the amount might be much smaller.

If at any time the Mayo Clinic should cease operation, obviously the Mayo Association would cease operation too. Should that contingency arise, it was specified in the Articles of Incorporation that whatever sums of money were available should be turned over to medical schools. There was not any one individual, not excepting members of the Mayo family, who would profit by that. They were all on salary as he was himself and William and Charles Mayo while they were alive were on salary just like everybody else.

Between the Mayo Clinic and the Mayo Association on the one hand and the Mayo Foundation on the other a line was to be drawn. The Mayo Foundation was attached to the University of Minnesota. The teaching part of their programme was entirely under the ægis of the University. Its teaching staff were members of the Medical Faculty. It graduates received their pass degree, not from the Mayo Foundation but from the University of Minnesota. The amount of money in the Mayo Foundation for medical education and research was 2½ million dollars. Of this sum 1½ million was given by Dr. William and Dr. Charles Mayo as a personal gift from their own fortunes. The capital sum was now 2½ million dollars which was invested at from 2½ to 3 per cent. 3 per cent. on 2½ million dollars yielded 75,000 dollars as interest. The amount received by Foundation Fellows (graduates and students) was 750,000 dollars, or approximately ten times the amount of interest accruing. The difference was made up from Association funds. There were 450 graduates and at any time between 100 and 125 graduate students were working there on a three years' programme in general surgery. In surgery those who had special aptitudes might be invited to stay on for an additional year as first assistants, and the same in other branches, but those were Mayo Clinic appointments not Mayo Foundation appointments.

The staff of the Mayo Clinic at the present time consisted of 282 persons, mostly holding the degree of M.D. The general clinical policy was directed by the Board of Governors, which was composed of nine individuals, all of them doctors except one—a matter which they felt to be fundamental in a medical organisation. The only layman on the Board of Governors was the Mayo Clinic Executive Secretary. A number of sub-committees were responsible to the Board. That was the way in which the organisation worked.

In conclusion, Dr. Gray said that he had only roughly sketched the outline of the work, but he hoped that he had given his audience some idea of how the Mayo Clinic and the Foundation were run. He would be glad to answer any questions.

He was asked whether the Mayo Clinic or Foundation received aid from State funds. Dr. Gray replied that it received no State aid at all. They had never accepted one penny from the Federal Government so far, and sincerely hoped that the time would never come when this seemed advisable. They had not in the States any Federal set-up for aid to medical education in peace time. They had a very large number of privately endowed schools. Indeed, some of their finest Universities—Harvard, Yale, Princeton, Columbia and so forth—were privately endowed schools. But taxes in the United States were such that there were no longer the people with large fortunes to leave to such institutions. That was a very serious problem and the question of Federal aid for medical and nursing education was one which was being debated.

During the Second World War the Mayo Clinic had a training course for Army, Navy and Air Force officers, but not one penny was ever asked from the Federal Government for such tuition. It was just service which the Mayo Clinic rendered during the war.

Dr. Gray added that one of the most delightful things about living in Rochester (Minnesota) was the fact that they had so many visitors, and if any of those present, students or members of the staff, ever undertook a trip to that part of the world, he hoped they would let them know a little time before they came and they would be glad to show all that was going forward. They would be able to see it practically all under one roof, or with the easiest possible journey from one part to another. Nothing was going on behind closed doors, and he reminded them that if they come to the States they could fly from Chicago to Mayo Clinic in an hour and a half.

Sir Heneage Ogilvie said that as one who had visited that part of the world he could confirm that the welcome which the visitor received was quite overwhelming and the wealth of material had to be seen to be believed. The visitor was given a large sheet of paper every morning and on it was marked something like 100 operations from which he could choose, as well as other branches of instruction which were proceeding. There was one thing perhaps they had not previously realised. They tended to look upon the Mayo Clinic as a machine, but what had impressed him so much as he had gone on the ward rounds was the tremendous care exhibited over every patient. For his own part he got more advantage from those ward rounds with Dr. Gray's colleagues even than in witnessing operations.

They had all been interested in the story of this Foundation and were tremendously grateful to Dr. Howard Gray for coming to tell them about it.

Sir Heneage Ogilvie's remarks were received with loud acclamation.

Guy's Sports, 1951

The Guy's Hospital Sports will be held at H.O.P. on Saturday, May 26th, starting at 2.30 p.m. Besides the usual track and field events there will be side-shows, a mixed three-legged race, a ladies' egg and spoon race, children's race, sack race and the traditional " Boro' Basket Race " performed by expert carriers from the market.

Mrs. Atkins has very kindly consented to present the prizes and the Athletic Club looks forward to meeting her and Mr. Atkins, the President, Mr. Lawrie and Mrs. Lawrie, and many Guy's men, past and present.

In the evening there will be a dance in the pavilion to the music of the Guy's dance band, and all are welcome.

The Management of Deafness

By J. D. TRETHOWAN, M.B., B.Ch., F.R.C.S.

DEAFNESS is one of the commonest of human afflictions. It is true to say that some degree of impaired hearing is the rule from the fifth decade of life onward, although in comparatively few people does this become a noticeable disability before senility is reached. The term is a relative one; the Otologist defines deafness as any impairment of hearing, however slight: but to the patient, it means a handicap sufficient to interfere with the normal course of his life. A minor degree may pass unnoticed by a labourer, whilst the same hearing loss in a telephone operator may make it impossible for her to continue in her occupation.

Until recent times, it was one of the most neglected of all infirmities. Throughout the early history of medicine, a succession of salves, lotions and instillations were prescribed, none of which is likely to have had the slightest beneficial effect. Until the latter half of the nineteenth century no real advances were made; but it is interesting to record that Sir Astley Cooper in 1802 reported to the Royal Society " on the treatment of deafness arising from obstruction of the Eustachian tube by perforating the tympanic membrane " in a series of 20 cases, with relief in most. For this memoir he was awarded the Copley Medal, and his method, later termed " aurisection," enjoyed a temporary vogue. The results, however, were found not to be permanent, and the operation was forgotten. In a modified form, the method has recently been revived and is used in certain cases of catarrhal otitis media with serous effusion into the middle ear.

Recently great strides have been made in diagnosis, in preventive medicine, in the alleviation of deafness by artificial aids to hearing, and in one disease, otosclerosis, by surgery. But the problem of restoration of natural hearing to the severely deafened remains largely unsolved; for the majority, relief is only possible by hearing aids, by lip-reading, and by overcoming the social and economic problems relating to the disability. Most sufferers can now be helped, but there is no room yet for complacency.

Diagnosis. The analysis of the cause of any case of deafness still depends fundamentally on long-established methods of examination: history, inspection, voice and tuning fork tests. From these we may determine whether the patient is suffering from deafness due to a lesion in the apparatus of sound conduction (middle ear) or of sound perception (internal ear; in the cochlea or auditory nerve), or from deafness of mixed type.

The measurement of the degree of the deafness and detailed study of its quality is defined as audiometry; and it is here that the recent advances in diagnosis have been made. The most generally useful instrument is the pure-tone electric audiometer, by which the limit of audibility (expressed as decibels of hearing loss compared with the normal threshold) is tested for a series of frequencies extending over the normal range of sound appreciation. The results are expressed as a graph known as an audiogram. Although not by any means indicating accurately the degree of useful hearing present for the spoken word, which depends on many factors other than the level of pure-tone hearing loss, audiograms are of the greatest value in determining the progress of deafness, or its response to treatment in an individual tested serially over a period of time.

Speech audiometry can also be practised by the broadcasting of words at controlled intensities by a gramophone and received by headphones. This method is particularly useful in the group testing of school children, and generally consists of series of numbers in pairs or threes, spoken in decreasing intensity until mistakes appear in the child's transcription of what he hears. By this means children with unsuspected lesser degrees of hearing loss may be picked out.

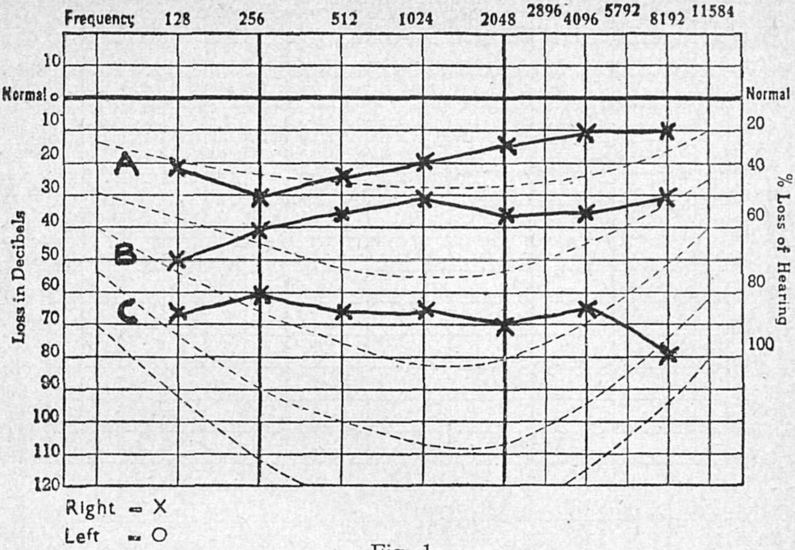

Fig. 1.

3 cases of conductive deafness. For clarity, one ear alone is shown—it is assumed that the loss is similar in both ears.

A. Average loss : 20 decibels. Slight deafness ; can get by in most social conditions, but misses odd words in conversation and likes a stall seat in the theatre ; no difficulty with the telephone.

B. Average loss : 35 DB. This is the critical level for social adequacy. Sits close to the radio, or turns it louder than others like ; dislikes the telephone ; doesn't go to the theatre or to meetings unless pressed ; would be helped considerably by part-time use of a hearing aid.

C. Average loss : 65 DB. Markedly deaf ; takes no part in social activities ; hears only raised voices, doesn't listen to the radio and is probably considered selfish in his pleasures. Should hear well with an aid, which would need to be worn on all occasions.

The assessment of deafness in early childhood (below the age of 5 or 6) is a special problem, as replies to voice or audiometer tests are usually grossly unreliable. It may be important to know the degree of deafness in order to plan special education, but testing is difficult. One of the best-known methods so far devised is the " peepshow " technique of Hallpike and Dix, for children from 3 to 6 years. It consists of a puppet show in a darkened box ; the child is taught that it can light up the show by a switch at its hand only when a red light shines, and a buzzer is sounded at the same time. Later only the buzzer is sounded, and the child who hears this turns on his switch. The buzzer may, of course, be of different frequencies and intensities, and an audiogram may be compiled by going through the full range. It is a time-consuming method demanding expert care and sympathetic handling of the children. For obvious reasons it is difficult to assess its accuracy ; but it is certainly ingenious in conception.

Prevention. The incidence of deafness in childhood, adolescence, and early adult life has been much reduced in recent years. This is largely due to the adequate treatment of acute otitis media and the prevention of its complications —particularly non-resolution with persistence of otorrhœa leading to permanent deafness of lesser or greater degree. The biggest factor in this conquest is the general use of penicillin ; and nowadays no case of acute otitis media,

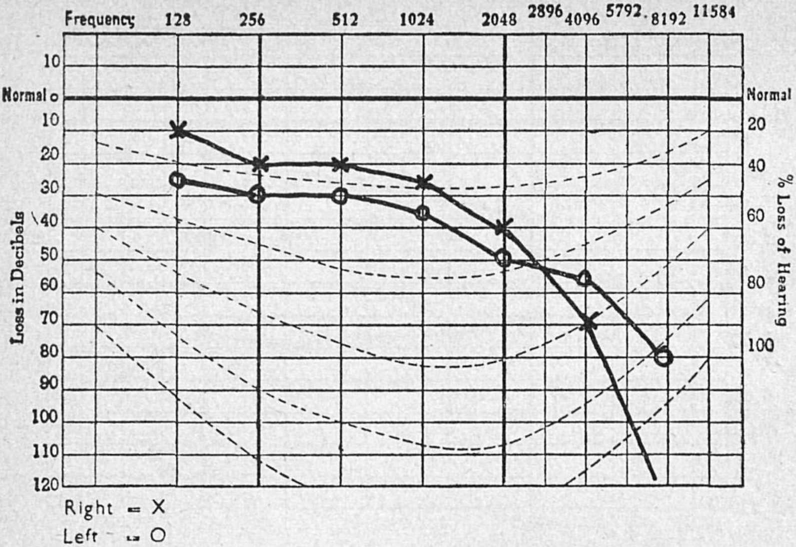

Fig. 2.

Perceptive deafness. Note high average threshold until higher tones are reached, when acuity falls away sharply. The range of normal speech is between 512 and 2048 cycles per second. His difficulties are in sound interpretation—likes clear slow speakers, preferably familiar to him, who do not raise their voices ; probably lip-reads to some extent. If intelligent, he may be helped by an aid, but is likely to be worried by accompanying " background noises."

treated early and adequately, should go on to chronic suppuration or to persistent deafness.

Social and economic benefits, and the development of public health measures in the control of the acute specific fevers have also played a large part in the reduced incidence of acute otitis media—and also of certain types of nerve deafness of infective origin.

There has been an increased recognition of the possible damage to hearing by occupational hazard—exposure to long-continued loud noise, which may ultimately lead to permanent damage to the cochlea. Early treatment has made deafness due to syphilis, congenital or acquired, a rare disease. And, finally, the control of Rhesus incompatibility may have some benefit in reducing the occurrence of congenital deafness.

Treatment. It is unfortunately still true that only in cases of deafness due to wax impacted in the external auditory meatus can cure by treatment be guaranteed. In certain other types, however, it may be possible largely to restore natural hearing, or at least to arrest the progress of the disability.

(1) *Otosclerosis.* This is a common cause of progressive middle-ear deafness, first noticed in early adult life, and usually with a history of similar deafness in the family. The hearing loss is due to the interruption of sound conduction by fixation of the stapes in the oval window of the labyrinth by overgrowth of newly laid-down bone ; the ætiology remains unknown. The deafness may be relieved surgically in suitable cases by the construction of a new window into the most accessible part of the bony labyrinth—the external semicircular canal—and protecting this by a flap consisting partly of the tympanic membrane, and partly of the skin of the external auditory meatus. Air-conducted sound is thus enabled to reach the labyrinth, and is transmitted to the cochlea ; and although the chain of ossicles is by-passed, a serviceable level of hearing can be restored.

Cases showing evidence of secondary cochlear degeneration (as tends to occur when the deafness is of long standing) are unsuitable for operation; and the results are not good in rapidly progressive cases. Technically, fenestration is a difficult operation, the ultimate stages having to be performed under an operating microscope magnifying 10–15 diameters. It is generally held that if an improvement in hearing is maintained for two years, it is unlikely to retrogress after this time; but the operation has only been widely performed since 1945, so that long-term follow-up figures are not yet available for analysis.

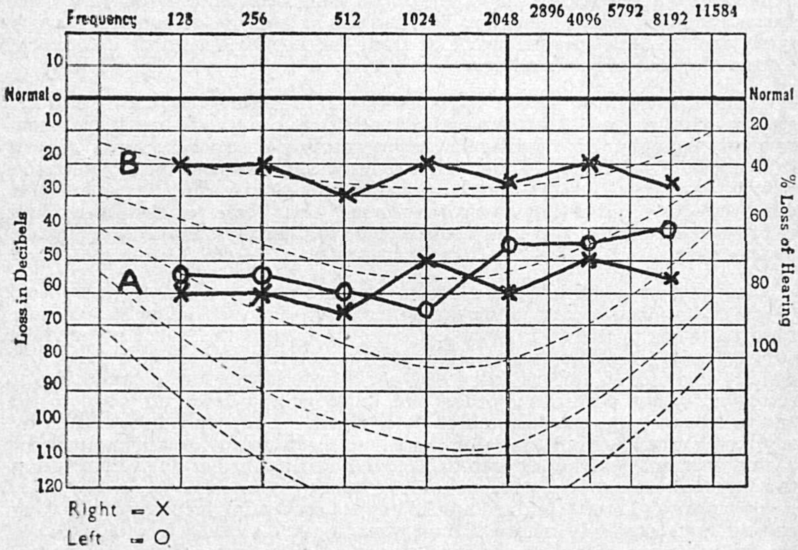

Fig. 3.

Otosclerosis. Successful result of fenestration of right labyrinth The average loss in the speech range has been reduced from 55 DB to 25—bringing the hearing above the critical level.

A.—Pre-operative level, both ears. B.—Post-operative, right ear.

(2) *Catarrhal Otitis with Effusion.* Such cases of mild inflammation of the middle-ear mucosa tend towards spontaneous resolution; but if repeated, and with organisation of the exudate, marked conduction deafness may result. It is generally possible in early cases to restore full hearing by the drainage of any fluid present through the tympanic membrane, by aerating the middle-ear by Eustachian tube inflation, and by attention to the causative infection in the nose, paranasal sinuses or nasopharynx.

(3) *Chronic Suppurative Otitis Media.* Here the position is less satisfactory, and the incidence of deafness from this cause is considerable. Many cases appear to develop insidiously without a recognisable preceding episode of acute otitis; and it seems probable that the predisposing factor is an undiagnosed acute infection in infancy (undoubtedly a common occurrence) of such severity as permanently to damage the muco-endosteal lining of the middle-ear cleft. This may remain infected, or later become so, presenting as an established chronic infection which cannot be cured by chemotherapy and may require surgery for its eradication.

There has been in recent years general recognition of the severe damage to the hearing which usually follows radical mastoidectomy—formerly the operation of choice for chronic suppuration; nowadays, "modified" operations are performed wherever possible, combining removal of all infected bone with the minimum of interference with the structures in the tympanic cavity. Also, with improved treatment of intracranial complications, it has become justifiable to persist longer with non-operative methods in the attempt to secure a dry ear, and to arrest the damage to the hearing. Together, these factors have resulted in diminution in the incidence of severe deafness due to this cause.

Deafness whose treatment is unsatisfactory. This group consists largely of sufferers from perceptive (nerve) deafness, congenital and acquired. Apart from those born deaf, it tends to afflict patients in later life, although infectious types arising from specific fevers or from the inward spread of middle-ear suppuration can occur at all ages.

The disability for speech appreciation in those affected may be much greater than suggested by tuning forks or pure-tone audiometry, as their particular complaint is of difficulty in interpreting the spoken word ; this is due to lack of perception of the higher tones with consequent distortion of the sounds received . . . " I can hear people talking, but I can't understand what they say—and if they shout, it's worse." For these patients lip-reading is of special benefit ; and many cultivate it, consciously or not, to greater or lesser extent.

Some forms of middle-ear deafness also are not benefited by treatment. These are grouped usually under the rather unsatisfactory heading of " chronic catarrhal otitis media." In some cases the deafness is the legacy of previous suppuration ; some are due to adhesions in the tympanic cavity binding the ossicles together in fibrous ankylosis, possibly following the organisation of recurrent serous effusions ; others are misdiagnosed cases of otosclerosis ; and in others again, no cause can be determined. They tend to be treated by repeated Eustachian inflations (often without regard to any exact measurement of improvement) which may even damage the hearing further by overstretching the tympanic membrane and ossicular system ; by operations on the nose, nasopharynx and tonsils in the doubtful hope of preventing further deterioration and the even less likely chance of improvement ; and recently by irradiation of the nasopharynx, aimed at reducing lymphoid tissue around the pharyngeal opening of the Eustachian tubes. Improvement is rare with these, or any other methods adopted if the deafness has been present for more than a few weeks or months.

There are also encountered many cases of mixed deafness—some of unexplained ætiology, many the result of secondary degenerative changes in the cochlea (presumably due to disuse atrophy) following long standing conductive deafness. For these, as for the others, many treatments have been tried, some on an apparently logical basis. All have hitherto been found wanting.

Hearing Aids. Undoubtedly the development of electrical hearing aids to their present pitch of efficiency provides the most valuable single benefit yet achieved in the alleviation of deafness.

The earliest of all aids was the hand cupped behind the ear ; ear trumpets date back at least 250 years. There is still a field of use for non-electrical aids —speaking tubes, trumpets and auricles ; owing to their simplicity, and their more natural tones, with comparatively small amplification, they are often the most suitable type for the elderly patient with pure nerve deafness. Electrical aids are most suitable for cases of middle-ear deafness ; but it is gratifying to find that a considerable proportion of sufferers from mixed or nerve deafness do, in fact, report markedly improved hearing with their use. The value of all aids depends simply on amplification, and they are therefore of no use to the totally deaf.

The modern electrical hearing aid has developed since the invention in Britain in 1924 of the radio valve amplifier ; but instruments were at first large and clumsy with irregular amplification through the frequency range. Considerable impetus was given by wartime developments, particularly miniature radio valves and smaller batteries, with longer life. All modern instruments, although differing in details consist basically of a microphone, amplifier and receiver. Most commercial aids, for economy of space, contain the batteries in the same case as the transmitter and amplifier ; but the " Medresco " aid, developed by the Medical Research Council, and now being distributed under the N.H.S. Act, has a separate pack for the two batteries, which are of greater size and capacity. In the " monopack " types, the low-tension battery may require renewal twice daily if the aid is used continuously.

The earpiece consists of a miniature telephone receiver fitting snugly into the external auditory meatus, preferably embedded in an individually moulded plastic insert. Bone conduction aids are less popular now than in the early days of electrical aids, as they require more power and give a poorer reproduction of the higher tones. A small percentage of sufferers do, however, prefer this type.

The only really satisfactory method of assessing suitability for an aid is to test the patient with one ; this should be part of the routine at a Deafness Clinic. Preliminary examination is important to rule out causes which could otherwise be relieved. If an electrical aid is selected, proper fitting and careful instruction in its use is required—many elderly patients are frightened by these " contraptions " ; and the writer regrets to record that he has encountered patients valiantly persisting in wearing aids in which the batteries must have been completely exhausted months before. The provision of an aid is only part of the process in restoring useful hearing to the deaf.

Aural Rehabilitation. This consists of the various methods by which a deaf person is enabled to return to normal society. It consists of lip-reading instruction, special training of the deaf child, and of welfare work dealing with the social problems created by deafness. In deafness clinics it also includes the proper selection of hearing aids by the Otologist, and their fitting and maintenance by qualified technicians.

Lip-reading. It has been said that " lip-reading and a hearing aid are the opposite sides of the same coin." This is certainly true for those types of nerve deafness which are only partially improved by an aid. The principle of successful lip-reading is the interpretation of speech by watching facial movements and filling in the blanks by using one's intelligence. Special training is usually required, for both eyes and mind, the latter being the most important : it is not possible to appreciate speech by watching lips alone, however clear the enunciation—intelligent guesswork is also necessary. It will therefore be seen that young people tend to learn more readily than the elderly, who may find it quite impossible to master.

Training is generally provided by Local Authorities or by private arrangement by the Associations of the deaf which are becoming established throughout the country. In this connexion, tribute must be paid to the National Institute for the Deaf, a voluntary body which is doing much fine work in training teachers in lip-reading, providing welfare facilities, supporting local associations, and in many other activities.

The special education of the deaf child. This is a subject of great sociological importance which cannot be discussed at length here. It must suffice, as a pointer to the problems involved, to enumerate the three categories into which deaf children fall, as defined by the 1933 Committee of Enquiry into this question.

1. Children with defective hearing who can, nevertheless, without special arrangements of any kind, obtain proper benefit from the education provided in an ordinary school.

2. Children whose hearing is defective to such a degree that they require for their education special arrangements or facilities, but not those of group 3. These facilities range from a favourable position in the ordinary school classroom to attendance at a special class or school.

3. Children whose hearing is so defective and whose speech or language is so little developed, that they require education by methods used for deaf children without naturally acquired speech or language. This grade includes the totally deaf.

It must be remembered that speech depends for its natural development on normal hearing, and that a child deaf in early infancy will be mute unless specially trained.

Finally with regard to rehabilitation, it is a characteristic of the deaf that they often feel that their disability makes them a burden on society ; in consequence they tend to withdraw into their own world, and their personal problems may be of such a degree as to require reference to a Psychiatrist ; in some cases an improvement in hearing as measured by audiometry may be attained by successful psychotherapy. The value of the association of the deaf in groups with other sufferers is manifest and should always be encouraged.

Conclusion. In view of the unsatisfactory nature of treatment in so many cases, the management of the deaf as regards advice and reassurance by the Otologist is of great importance. Problems should be discussed frankly, and the cause of the deafness explained, together with the reasons why cure is impossible. Encouragement should be given, but not too much sympathy. No patient should be told he may become totally deaf : in the first place such a gloomy prognosis is rarely justified ; and secondly, total deafness is the greatest fear of the hard-of-hearing. Indeed, reassurance on this point alone will often be worth more than anything else that can be offered by way of treatment. A few extra minutes spent in talking to the deaf patient is worth more than years of useless therapy.

I should like to thank Mr. Cann and Mr. Reading for their advice in the preparation of this paper.

May		ACADEMIC
		Exhibition. Surgical Department. "Burns."
21st	1.00.	Mr. Cann. Clinical Lecture.
22nd	12.00.	Mr. R. O. Holland. Dental Clinical Lecture. "The Tongue." Dental Theatre.
	1.00.	Dr. Moynahan. Clinical Lecture. "Boils and Carbuncles."
24th	1.00.	Mr. Lawrie. Clinical Lecture.
	4.30.	X-Ray Meeting. Gordon Museum.
25th	1.00.	Dr. Kauntze. Clinical Lecture. "The Treatment of Cardiac Failure—II."
	2.15.	Medical Department. Clinico-Pathological Meeting. Pathology Lecture Theatre.
26th	10.00.	Surgical Department. Clinico-Pathological Meeting. Clinical Theatre.
28th	1.00.	Mr. Lewis. Clinical Lecture. "The Treatment of Cancer of the Uterine Cervix."
31st	4.30.	X-Ray Meeting. Gordon Museum.
June		
1st	2.15.	Medical Department. Combined Round. Preclinical Classroom.
7th	1.00.	Dr. W. W. Scott, M.D., of the Brady Urological Institute, Johns Hopkins Hospital, U.S.A.

May		SPORT
26th		Annual Sports.
27th	2.30.	Cricket 2nd XI *v.* Hadley. (Away.)
30th	11.00.	Cricket 1st XI *v.* St. George's Hospital. (Hospital Cup, 2nd Round.) Athletics *v.* Q.M.C. and L.S.E. (Ladywell).
June		
2nd	2.30.	Cricket 1st XI *v.* Bognor Regis. (H.O.P.) Cricket 2nd XI *v.* Barrow Blackman. (H.O.P.) Athletics. County Championships.
3rd	2.30.	Cricket XI *v.* Crickets. (H.O.P.)

Correspondence

Garden Party

SIR,—It may be of interest to your readers to know that the Governors have decided to hold a garden party in the grounds of the Hospital on the afternoon of Wednesday, June 20th, 1951, on the occasion of the Festival of Britain. The Wards and Departments of the Hospital and School will be open during the afternoon from 3–6 p.m. Invitations will be sent in due course to representative groups of patients, staff, and students, and their friends.

Yours, etc.,
W. D. DOHERTY,
Superintendent.

Superintendent's Office,
Guy's Hospital, S.E.1.

" The Constant Wife "

SIR,—Among the applications and donations that have been received requesting tickets for the forthcoming production of " The Constant Wife," have been several bearing no name. If those persons whose applications have not yet been answered will let me know, I shall be pleased to send them their tickets.

Yours, etc.,
PETER F. STEBBING,
Hon. Sec.

Guy's Theatre Club.

British Students' Tuberculosis Fund

SIR,—The Students' Union wishes to bring to the attention of readers that the British Students' Tuberculosis Fund is appealing for £50,000 to build a Students' Tuberculosis Centre in Great Britain.

The percentage of students in Britain known to have interrupted their studies for a term or more because of tuberculosis is approximately 0.2 in universities, technical and training colleges, and 0.94 among medical students.

It is proposed therefore to make June a " T.B. Month " during which every effort will be made to raise a substantial contribution from Guy's students.

Yours, etc.,
J. H. WILLIS,
Chairman, T.B. Appeal Sub-Committee.

Guy's Hospital,
London Bridge, S.E.1.

Guy's Alumni Lunch

SIR,—All Guy's men are invited to attend a lunch which will be held during the Annual Meeting of the British Dental Association, on Wednesday, 4th July, 1951, at the Mayfairia, 32, Bryanston Street, at 12.30 p.m. for 1 p.m. Mr. E. B. Dowsett will be particularly pleased to meet old Guy's men on this occasion.

The price is 15*s.* and will those wishing to attend please send notification and cheque to Mr. B. W. Pett, Dental Department, Guy's Hospital, S.E.1, stating the year they were at Guy's, in order that seating arrangements may be made.

Yours, etc.,
B. W. PETT.

Dental Department,
Guy's Hospital,
London Bridge, S.E.1.

Reviews

Lecture Notes on Emergency Diagnosis without Laboratory Aid. By KAUR L. BAUR. Revised by JEAN GRANT. Blackwell. *Price* 6*s.*

This little book is based on lectures given in the University of Munich, and the English is unfortunately marred by traces of its German origin. Nevertheless, a book which deals as well as this does with the diagnosis of medical emergencies by simple methods deserves a warm welcome in a hospital which prides itself upon its clinical tradition. The price is another advantage. Anyone prepared to forego two packets of cigarettes could possess this book and still have money over to buy a glass of beer. As a doctor he would be the richer.

R.E.I.

Theatre Sister. By G. VAISEY HARRAP. *Price* 10*s.* 6*d.*

I enjoyed reading the romantic life of a nurse who eventually became a Theatre Sister. The story is good and for one who knew nothing of hospital life this book would give a pleasing story, but not an impressive account of a Theatre Sister.

The story deals far more with the heroine from the time when she first wishes to become a nurse and the story continues with accounts of the " rough and the smooth " life she led to complete this training.

I wondered when I was ever going to reach the stage where the nurse became the responsible and important person—as the title of the book.

However, as a story should be completed, all's well that ends well.

D.S.

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Sport

CRICKET

1st XI FIXTURES, 1951

Date	*Opponents*	*Ground*	*Time*
May Sat. 26th	Annual Sports ..		
Wed. 30th	St. George's Hospital (Hosp. Cup 2nd Round)		11.00
June Sat. 2nd	Bognor Regis ..	Home	2.30
Sat. 9th	Orsett	Home	2.30
Sat. 16th	Kenley	Home	2.30
Sat. 23rd	Met. Police ..	Home	2.30
July Sat. 7th	Finchley ..	Home	2.30
Sat. 14th	Private Banks ..	Home	2.30
Sat. 21st	Kingsmead ..	Away	2.30
Sat. 28th	Guy's Staff Cricket Match	Home	2.30
Aug. Tues. 7th	Mersham ..	Away	11.30

SUNDAY FIXTURES

Date	*Opponents*	*Ground*	*Time*
June 3rd ..	Crickets ..	Home	2.30
10th ..	Finchley ..	Away	2.30
24th ..	R.N.V.R ..	Home	2.30
July 1st ..	Bognor Regis ..	Away	11.30
8th ..	Streatham ..	Home	2.30
22nd ..	Casuals	Home	2.30

2nd XI FIXTURES

Date	*Opponents*	*Ground*	*Time*
May Sun. 27th	Hadley	Away	2.30
June Sat. 2nd	BarrowBlackman	Home	2.30
Sat. 9th	Orsett	Away	2.30
Sat. 23rd	BarrowBlackman	Away	2.30
July Sat. 14th	Private Banks ..	Away	2.30
Sat. 21st	Old Wimbledonians.	Home	2.30

Guy's C.C. *v.* Wallington C.C.

At Wallington

29th April, 1951

Guy's 205–8. Wallington 210–9 dec.

This, the opening match of the season, was played in wintry conditions, although only a half an hour's play was lost in all.

Wallington won the toss.

Their negative batting put few runs on the board before lunch. After the interval the score was pushed along, their skipper declaring with 210 runs for the loss of nine wickets.

Guy's lost an early wicket but changes in the batting order and a good innings by the skipper enabled Guy's to come within six runs of victory for the loss of 8 wickets.

Guy's

D. E. Blake, c & b Griggs	12
D. M. F. Allan, c & b Griggs	72
N. Cooke, b Ready	17
M. Williams, b Ready	0
W. J. Howells, b King	30
D. M. Lipington, not out	42
M. Willis, b Griggs	5
E. Gibbons, b Griggs	3
M. A. C. Lyon, b Ready	6
J. Riley, not out	8
H. Bissoon Dath	did not bat
Extras	10
	205

Bowling : M. A. C. Lyon, 16-3-42-0 ; N. Cooke, 8-2-18-0 ; J. Riley, 13-1-48-5 ; D. M. E. Allan, 12-3-42-0 ; H. Bissoon Dath, 15-4-49-3 ; M. Williams, 2-0-7-1.

Guy's C.C. *v.* Wanderer's C.C.

At H.O.P.

2nd May, 1951

Result : Lost—Guy's 246. Wanderers 308–4.

Better cricket weather than was expected, but even so still "two sweater weather." Wanderers lost the toss but found themselves batting on a plumb wicket.

Rushing the score along they had 150 runs before lunch for the loss of only one wicket. They declared their innings closed after 171 minutes at the wicket with 308 runs on the board for the loss of only four wickets.

Guy's faced this formidable task with not a little apprehension. An opening partnership of 84 runs gave us heart, but the home side never looked like making the runs, the tail finally succumbing to the onslaught seven minutes before the end of play.

Guy's

D. Allan, b Turton	56
N. Cooke, c & b Turton	35
D. Lipington, l.b.w. Malcolm	45
P. Pickett, b Oadsky	12
M. Williams, run out	31
M. Willis, b Oadsky	13
W. J. Howells, b Oadsky	1
H. Bissoon Dath, not out	31
J. Riley, c & b Turton	6
K. Wilkinson, b Turton	4
M. A. C. Lyon, b Turton	2
Extras	10
	246

Bowling : M. A. C. Lyon, 15-0-70-1 ; N. Cooke, 5-0-17-0 ; P. Pickett, 15-1-77-0 ; J. Riley, 2-0-15-0 ; D. M. E. Allan, 11-0-55-1 ; K. Wilkinson, 3-0-12-0 ; H. Bissoon Dath, 2-0-17-0 ; M. Williams, 7-0-36-0.

HOCKEY

Inter-Hospitals Senior Cup Match

Guy's *v.* St. Thomas's

At Teddington. Result—Lost 2—0

This match, played on St. Mary's perfect pitch at Teddington in glorious spring weather, was greatly enjoyed both by players and spectators.

A good, fast, clean game was played by both sides but our opponents' better cohesiveness especially in the forward line, and just that little extra punch throughout gained them the day.

Guy's put all they had into it and nearly registered on several occasions but they never quite managed to net it from an "on side" position. One can only hopefully suggest that they had a better Easter holiday than St. Thomas's.

Team : C. Bishop ; G. A. Danford, D. Linahan ; C. R. Robinson, E. A. Murray, R. Sansfield ; D. Duckworth, H. Meyer, S. R. Earl, C. H. Opie, R. Hodson.

Hospital Information, etc.

APPOINTMENTS VACANT

GUY'S HOSPITAL AND MEDICAL SCHOOL. THE BETHLEM ROYAL HOSPITAL AND THE MAUDSLEY HOSPITAL

Applications are invited for the appointment of Part Time **Consultant in Neuro-radiology.** The main duty will be to take charge of this speciality at the hospitals named but the person appointed will be expected to undertake some general radiological work. The appointment will be for six sessions a week with the possibility of extension to eight sessions a week in about a year's time, and the salary and conditions of service will be in accordance with the agreed terms and conditions for hospital medical and dental staffs. The appointment will be subject to the National Health Service (Superannuation) Regulations, 1950.

Applications, stating date of birth and giving full details of qualifications and experience and the names and addresses of three referees, should be made, in writing, to the Superintendent, Guy's Hospital, London Bridge, S.E.1, so as to reach him not later than **23rd May, 1951.** Canvassing will disqualify but applicants may visit the hospitals by arrangement with the Superintendent.

Applications are invited for the following appointments in the **Ear, Nose and Throat Department** :—

2 full time **Middle Grade Registrars** for duty at Guy's, Orpington and Evelina.

1 part-time **Senior Registrar.**

Forms of application, obtainable from the Medical School Office, should be lodged with the Dean not later than **23rd May, 1951.**

APPOINTMENT

R. S. Lawrie, M.D., M.R.C.P., F.R.C.S., Surgeon, Bolingbroke Hospital, Wandsworth.

THE TREASURER'S MEDAL AND PRIZE FOR CLINICAL SURGERY

The following awards have been made :—

Medal and Prize ..	Mr. E. D. Sonnenfeld
Certificate	Mr. W. V. James

THE TREASURER'S MEDAL AND PRIZE FOR CLINICAL MEDICINE

The following awards have been made :—

Medal and Prize.. ..	Mr. W. V. James
Certificates	Mr. K. V. Cooper Mr. L. Wollner

THIRTY CLUB DINNER

Members are reminded that the annual dinner of the Thirty Club is being held on **Friday, June 8th, 1951,** at the Royal Air Force Club, 128, Piccadilly, W.1, at 7.0 p.m. Notices have already been sent to members. Will any member who has not received one please write to Mr. Goodliffe, Medical School Office, Guy's Hospital, S.E.1.

PASS LIST

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
April, 1951

Surgery
N. M. Midgley

Medicine
*P. N. Barua

Midwifery
F. D. Burgess E. J. Elkington

* Has completed the examination.

UNIVERSITY OF OXFORD

Readership

R. V. Coxon, M.D., has been appointed to the Readership in Human Physiology for seven years from October 1st.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

Fellowship

The following have been elected Fellows of the College :—

R. T. Grant, O.B.E., M.D., F.R.S., W. W. Payne, M.R.C.P.

CHANGES OF ADDRESS

H. J. Croot, F.R.C.S., Medical School, Makerere College, P.O. Box 351, Kampala, Uganda.

W. G. Cross, M.B., B.S., B.D.S., Gaisgill, Elstree, Herts. Tel. : Elstree 1056.

R. V. H. Goulder, M.B., B.S., Highbury Lodge, Hitchin, Herts. Tel. : Hitchin 286.

P. D. Harvery, M.R.C.S., L.R.C.P., L.D.S., 78, Banbury Road, Oxford. Tel. : Oxford 58785.

J. W. McLean, L.D.S., R.C.S., 15, South Street, Park Lane, London, W.1. Tel. : Grosvenor 1912.

J. G. Stebbing, M.B., B.S., 1, Wade House, Parkers Row, London, S.E.1. Tel. : Bermondsey 2068.

Surg.-Lt.(D) P. J. F. Woodroof, " Strathaven," Arundel Drive West, Saltdean, Sussex. Tel. : Rottingdean 2005.

F. L. D. Young, M.R.C.S., L.R.C.P., Mental Hospital, Parkside, Adelaide, S. Australia.

BIRTHS

FRANKLIN.—On February 18th, 1951, at Nuffield House, to Betty (née Hagger), wife of J. B. Franklin, M.B., B.S.—a sister for Anne (Mary Elizabeth).

HOLLIS.—On April 11th, 1951, at Guy's Hospital, to Betty (née Blayden), wife of P. W. T. Hollis, M.B., B.S.— a brother for Michael (Peter Anthony).

KEATES.—On May 3rd, 1951, at Stoke-on-Trent, to Mary (née Bowra), wife of M. D. Keates, M.R.C.S., L.R.C.P.—a brother for Peter (Jeremy Charles).

STEBBING.—On May 10th, 1951, at Nuffield House, to Dorothy, wife of John G. Stebbing, M.B., B.S.—a daughter (Susan Elizabeth).

MARRIAGES

BAIRD—HORNBY.—On April 5th, 1951, at St. Mary the Virgin, Ewell, Surrey, Hugh M. Baird, M.B., B.S., to Sheila G. Hornby, S.R.N.

CLARK—LOWTHER.—On April 21st, 1951, at St. Edmund's Church, Roundhay, Leeds, Donald W. Clark, M.B., B.S., to Barbara M. Lowther, S.R.N.

SONNENFELD—GERBER.—On May 11th, 1951, in London, E. Desmond Sonnenfeld, to Rianette Gerber.

DEATHS

SALVAGE.—On April 5th, 1951, John Valentine Salvage, M.D., of 52, Burleigh Mansions, London, W.C.2.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

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PASSIM

WAS it always the same on a Saturday afternoon at Guy's, we wondered? Did our bewhiskered and earnest forebears, always so industriously depicted, have their disconsolate moments as well? After all, there *was* work to be done. But none of it was very exciting nor, for that matter, was it overwhelmingly urgent. So we drooped our way down the stairs of the College, with the murky walls bearing the age-long stains of fire extinguishers let off on nights of excitement but dimly remembered, and found ourselves in the Maze Pond. " Back in a few minutes, Ted ; the Ex. will be in for us ! " And so we drifted in the direction of the Colonnade. The sky was grey and the weather undecided about rain or not. As for the Hospital, it appeared outwardly, we supposed, much the same as ever, despite the recent iron girders propping up the walls of Guy's House (much less conspicuous than we thought they would be) and despite the obvious intrusion of the cumbersome Mass Radiography vans by the Memorial Gates. Yet the customary spirit of lively awareness and bustle was missing. It was almost as though the place, with rather indifferent grace, had given itself over to the visitors. They were to be seen in ever-increasing groups outside the various ward doors, grasping their flowers and fruit and talking, as it were, a little uncomfortably, as though in somewhat fearful anticipation of what might happen next.

Thence along St. Thomas's Street. There, it was plain, virtually everyone had gone away for the week-end. In our envy we pictured them, basking in the sun of the countryside, enjoying to the full their cricket, their golf and their sailing. What had we by comparison? Even the costermonger had left his barrow, littered with bananas, as though he cared nothing at all for it, and had himself retired to the Bacchanalian and, maybe, Lethean delights of the " Grapes." Is it strange that we were tempted to follow his example?

Round into the Boro' High Street where we quickly realised that everybody else had somewhere to go, something to do. At least they all scurried about, jumped on and off 'buses, enquired the way repeatedly and ran to catch trains. And we made our way slowly up to the Bridge Approach, being buffeted as we did so by the sordid litter which eddied round our feet.

Possibly it was the sirens on the river that summoned us in their direction—the sirens of the Port of London, not those of Boulter's Lock ; perhaps it was just fate. London to our left appeared but a jumble of buildings, without even the glare and reflection of the Festival lights to which we had more recently become accustomed. And then our gaze was arrested. Just to the right at the far end of the Bridge was a cluster of flags and bunting. The reason? A vast and shining new vessel, the good ship " Patricia " tied up there at the Freshwater Quay. On her maiden voyage from Sweden she had apparently found her scheduled berth at Tilbury not to her liking. Instead, in all the glory and majesty of her captivating virginity she had seen fit to venture into the more exciting reaches of the Thames. In so doing she had been the largest passenger vessel ever to be honoured by the raising of Tower Bridge.

As we came upon her we realised how self-conscious she must have felt, rather like the lady in evening dress, brought by a proud consort and shown off to the denizens of the public bar. Trippers clustering in pleasure launches looked up at her in awe, pedestrians craning over the Bridge peered down into her cabins, 'buses slowed upon their journeys to get a better view of her—and river police boats fussed round as though to exercise their authority and protection.

We had been told as youngsters about dream castles, but this, at least, was a dream ship to be sure. Her hull and superstructure were of unsullied white, her decks varnished, her fittings burnished, her masts yellow and her smoke-stack blue-and-gold. The officers, in their seeming nonchalance, appeared immaculate, and the stewardesses, to judge by occasional glimpses, divine. We pictured ourselves en voyage, making our way down to the estuary into the dawn, thence across the North Sea, lounging and lunching by day, dining and dancing by night—" satins and laces and smell of Cologne." We could see the fiords, we scented the pines and thrilled with the thought of the climate. We joined the expeditions, we entered wholeheartedly into the mid-summer antics and we were exhilarated by the freshness and charm of our Scandinavian hostesses.

Then we felt suddenly cold and wet. Yes, it was raining ; the weather had made up its mind after all. Dreary London closed in upon us. We could afford to romance no longer, at any rate not in comfort. Back we hurried once again to the Hospital. After all, there were those reports to be looked up in the Registry, there were those X-rays to be scrutinised again and, without doubt, there would be relatives wanting to have a word with " the doctor " before they left.

June		ACADEMIC
		Exhibition. Surgical Department. " Obstructive Jaundice."
4th	5.00.	Dr. W. W. Scott, Brady Urological Institute, Johns Hopkins Hospital. Film Demonstration. Clinical Theatre.
5th	1.00.	Mr. Blackburn. Clinical Lecture. " Thyrotoxicosis and Thiouracil."
7th	1.00.	Dr. W. W. Scott, Brady Urological Institute, Johns Hopkins Hospital. Clinical Lecture. " The Diagnosis and Trestment of Tumours of the Urinary Bladder."
	4.30.	X-Ray Meeting. Combined Round.
	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
8th	1.00.	Sir John Conybeare. Clinical Lecture. " High Blood Pressure."
	2.15.	Medical Dept. Combined Round.
	4.30.	Pierre Jeannerat. Gordon Museum. " The Art Exhibition."
9th	10.00.	Dr. W. W. Scott, Brady Urological Institute, Johns Hopkins Hospital. Surgical Departmental Round. Clinical Theatre.
11th	1.00.	Dr. M. J. McArdle. Clinical Lecture. " Neuralgia of the Face and Jaw."
	2.00.	Dr. Henry Cave, President of the American College of Surgery. Surgical Ward Round.
	4.45.	Science Club. A.G.M. followed by display of films by members. Staff Common Room. (Tea, 4.30 p.m.)
12th	1.00.	Dr. Henry Cave, President of the American College of Surgery. Clinical Lecture. " Diverticulitis of the Colon."
14th	1.00.	Mr. Eckhoff. Clinical Lecture. " Malignant Facial Tumours."
	4.30.	X-Ray Meeting. Gordon Museum.
15th	1.00.	Dr. Douthwaite. Clinical Lecture.
	2.15.	Medical Dept. Combined Round.
18th	1.00.	Sir Heneage Ogilvie. Clinical Lecture. " The Treatment of Advanced Cancer."

June		SPORT
5th		Tennis. 1st VI *v.* Royal Naval College. (Away).
9th	2.30.	Cricket. 1st XI *v.* Orsett. (H.O.P.).
	2.30.	Cricket. 2nd XI *v.* Orsett. (Away).
		Tennis. 1st VI *v.* St. Mary's Hospital. (H.O.P.).
		Tennis. 2nd VI *v.* Sundridge Park. (Away).
10th	2.30.	Cricket. 1st XI *v.* Finchley. (Away).
16th	2.30.	Cricket. 1st XI *v.* Kenley. (H.O.P.).
		Tennis. 1st VI *v.* Winchester. (H.O P).
		Ladies' Tennis VI *v.* Royal Dental and Charing Cross. (Away).

The Treatment of Tuberculous Meningitis

By K. S. MacLEAN, M.D., M.R.C.P.

From a lecture to the S.E. Regional Physicians on April 28th, 1951.

TUBERCULOUS meningitis seems to me to offer a special challenge to the medical profession of today. Perhaps in no other medical disease does the knowledge and judgment of the physician, the skill of the nursing staff and the accuracy of the pathologist contribute so directly to the likely outcome of each case. Indeed, these factors will cause a variation from perhaps fifteen to over sixty per cent. in the number of patients that are going to be restored to health. At the outset of this talk, I wish to make it quite clear that my personal experience of these cases is both recent and limited. My real interest in the disease commenced only last October when I spent two weeks working with Dr. Honor Smith in Sir Hugh Cairns' department at the Radcliffe Infirmary, Oxford. I was most impressed with what I saw and returned an enthusiastic disciple, and although I have learned much from the cases we have treated at Guy's during the past winter, I wish to acknowledge that much of my talk today is based upon the experience obtained at the Radcliffe Infirmary.

I am not concerned today with the all-important problem of the early diagnosis of these patients, except to say that, with the present therapeutic agents available, a figure of seventy per cent. cure would appear to be the maximum that can be attained, and that further improvement must depend upon a larger number of early cases being received at centres where the modern treatment can be given. The idea that patients who have tuberculous meningitis would be better dead is still prevalent in the minds of some practitioners and we must do all we can to eradicate it. Tuberculous meningitis has become a medical emergency and delay in diagnosis through failing to lumbar puncture a patient in whom the possibility of this condition exists, is quite inexcusable.

General Considerations.

The progress of the disease during treatment is to be measured in months or weeks and not in days, and it is often difficult to be certain whether or not improvement is taking place. It is, therefore, absolutely essential that the fullest records should be kept, both as regards the clinical condition and the characteristics of the daily specimen of C.S.F. Every specimen must be examined for the presence of tubercle bacilli by direct smear and culture, and the protein, total cells and polymorphs alone estimated. The pressure at thecal puncture should also be noted, and it is convenient to record all these criteria together with a weekly sedimentation rate and weight on one large chart. The level of streptomycin in the cerebrospinal fluid must be estimated from time to time. A level of over 20 ug. per c.c. is satisfactory. The sugar level should be recorded from time to time, but while of great value in the initial diagnosis, we have not found it of much help in the evaluation of the progress of the disease. The chloride level, depressed in widespread disease, is in fact of little practical value.

Clinical improvement associated with a gain in weight and a falling B.S.R. is by far the most important factor in assessing progress, and in a patient who is doing well such improvement should be obvious from week to week. If at the same time the daily specimens of C.S.F. show a progressive fall in cellular and protein content, so much the better, but it is not uncommon for improvement in the C.S.F. to lag several weeks behind the clinical condition, and the continuance of a cellular fluid, while showing that there is still active disease present need not alarm us unduly. The opposite state of affairs, when there is progressive improvement in the cellular content of C.S.F. associated with deterioration in the patient's general condition shows that there is little reaction to the disease and is of the gravest import. As might, therefore, be expected a strongly positive Mantoux is a good prognostic feature.

The problem of how much variation in the C.S.F. may be attributed to the direct effect of streptomycin is of course a most important one, and one to which there is at present no satisfactory agreement. Certainly it is unusual for the fluid to return to complete normality until intrathecal therapy has been abandoned. I am sure that protein values of 100 mg. may on occasion be due to irritation from streptomycin and that the cellular response from this cause may certainly be of the order of 30 or 40, and such changes may continue for weeks. Personally I am very suspicious of polymorphs and believe that they are very likely to indicate active disease. Judgment of cure can only be made by following the trends in the chart; steady improvement in the C.S.F. cells and protein in a patient, who has clinically recovered and is gaining weight, make it likely that the disease has been controlled while practically normal fluid in a patient with recent weight loss and a high B.S.R., should lead us to anticipate a fatal outcome.

STREPTOMYCIN THERAPY.

Let us now consider what can be accomplished by the use of streptomycin. It is approximately true to state that a cure rate of 50 per cent. of all cases admitted to hospital is the most that can be expected from the use of this drug alone. The results of many centres, including Guy's, have fallen far short of this figure, and the cardinal mistake appears to be that too little intrathecal treatment is given in the initial course. Streptomycin or dihydrostreptomycin, which in general is less toxic although possibly more likely to cause permanent deafness, must be given by both intramuscular and intrathecal routes. Treatment should never be withheld because bacilli have not been recovered from the C.S.F.

Intramuscular injections of 0.75 or 1 gramme b.d. must certainly be given for six months, and if the disease is complicated by lesions elsewhere, for nine months to one year. Intrathecal injections of 100 mg. in adults, if tolerated, must be given daily for at least 56 days after the last positive finding of bacilli in the C.S.F. and then it should be stopped only if the patient is clinically cured, is gaining weight steadily and the protein and cells in the fluid have been falling steadily for some time. I have recently seen two relapses where an almost normal fluid lulled us into a state of false security and intrathecal treatment was suspended after 35 and 30 injections respectively. Dr. Honor Smith now thinks that a course of 56 injections as a minimum is probably too short, and it may well be that at least 70 consecutive injections should be insisted on. If at the end of the course, there is unhealed disease in any part of the body, it is wise to give at least two further courses of 42 injections each during the ensuing months. If practicable the lumbar route is the safest and best for all intrathecal therapy, but however careful one may be difficulties are bound to arise in many cases. The disease may cause a spinal block at any level or the daily injections are apt to produce a traumatic local arachnoiditis which may harbour nests of bacilli or effectively close the lumbar route. Again, the skin may break down so that the risk of introducing infection prohibits further injections. Where possible, three adjacent spaces L2–3, L3–4 and L4–5 should be used on subsequent days, and the care of the skin is of paramount importance. Iodine should not be used as sterilising agent. Cetab is a safe substitute and no dressing should ever be applied. Local anæsthetic, if the patient is conscious, should be used as sparingly as possible, and though a nervous patient may be sedated before lumbar puncture, the procedure should not be done under an anæsthetic as trauma is much more likely to occur in an unconscious patient. Needless to say a fine sharp needle is a sine-qua-non.

However careful one may be, only too frequently the lumbar route becomes impossible, and the drug must then be given into the cistern or ventricles. A cisternal puncture is more dangerous than a ventricular tap, and so if the lumbar route is abandoned burr holes must always be made. Some authorities prefer the insertion of a catheter into the ventricle to the trauma caused to the brain by frequent needle puncture with the possibility of hæmorrhage. The catheter must be changed each fortnight. The danger of introducing infection is, however, much greater with a catheter in situ, and certainly this complication occurred in the only case I have treated with a catheter, so that a daily puncture with a fine lumbar puncture needle would appear to us to provide the lesser hazard. Bleeding into a ventricle, although extremely alarming to the operator, seldom does any very serious damage. If blood does come out through the needle this should be left in situ for 2 or 3 minutes and then very gradually withdrawn. Although the ventricular route is excellent for the introduction of drugs, the ventricular fluid unfortunately does not mirror the changes in the main body of the C.S.F., so that every third day the cistern must be tapped in order to follow the progress of the disease.

In our experience toxic reactions to intrathecal streptomycin have been very common and at times alarming. There is vertigo and intense vomiting and physical signs have included nystagmus, squints and the loss of all tendon reflexes. In severe reactions the patient may become very drowsy and respiration may become very shallow and slow. Epileptiform attacks may also occur. These symptoms come on some 6 hours after lumbar puncture although very much quicker if the injection is given by the cisternal or ventricular route. They have caused the daily dose to be radically reduced to 30 or 40 mg. and in one instance injections could only be given on alternate days. Destruction of the labyrinth by streptomycin is almost bound to occur sooner or later in this disease. Unfortunately permanent nerve deafness, which seems to occur in about 20 per cent. of patients who have had full treatment, is a tragic complication of streptomycin therapy. Hydrocephalic attacks may also follow intraventricular or cisternal administration.

Other Drugs.

Attempts to bring about the dissolution of tuberculous tissue in the meninges have been made by various workers by using streptokinase. Cathie and Macfarlane (1950) have recently published an impressive series of 40 cases with a recovery rate of 58 per cent. Most of these patients received only 24 intrathecal injections spread over 6 weeks and it would certainly appear that streptokinase must have played a considerable part in their success. Although the administration of streptokinase is relatively safe, its action in destroying the tuberculous tissue would appear to be less efficient than that of tuberculin, which will be considered below, and I do not think it is likely to assume a permanent place in the therapy of this condition.

An alternative antibiotic to streptomycin which would be effective in those patients who had become streptomycin resistant, would, of course, be a most valuable discovery, but at the present time we do not possess such a drug. Sulphetrone has recently been shown to be ineffective, and neomycin and viomycin are at present too toxic to be of practical value. Para-aminosalysilic acid probably has a limited value in tuberculous meningitis, and should certainly be given routinely to all patients who have active renal or pulmonary disease. In the absence of these complications it is a fortunate fact that the development of resistance is an unlikely event, and the vomiting which this drug sometimes produces may make its employment more of a hindrance than a help.

The Place of Tuberculin (P.P.D.) in Treatment.

If intrathecal injections of streptomycin are given at daily intervals to patients suffering from tuberculous meningitis, it will be noticed that at some time between the 4th and 14th day of treatment the number of cells in the C.S.F. rises very sharply and such rise is accompanied by a rise in the protein. Such changes are very transient although they may be repeated at intervals of a few days. At first it was thought that this cellular reaction must be due to the direct effect of the streptomycin, but it was noted that in cases where streptomycin had been given in non-tuberculous conditions, such as patients with poliomyelitis who had been wrongly diagnosed, the cellular and protein response was never seen.

Smith and Vollum (1950) believed that this phenomena might be due to the action of tuberculin produced from the breakdown products of tubercle bacilli destroyed by the intrathecal streptomycin, and in order to test this theory they administered a dose of intrathecal tuberculin to a small child who had failed to make progress on intrathecal streptomycin and who was thought to be beyond medical aid. Not only did they reproduce exactly the swing in cells and protein seen with intrathecal streptomycin in their previous patients, but the child immediately started to improve, and is now a healthy little boy. They were not slow to realise that they had found an immensely effective weapon with which the tuberculous exudate could be attacked far more effectively than by streptomycin alone, and the bacilli buried in tuberculous tissue could thus be brought into direct contact with the C.S.F. Needless to say it is essential to have an effective concentration of streptomycin in the C.S.F. to which the organisms are sensitive. Tuberculin is an adjunct to streptomycin therapy ; it can never be an alternative and if the bacilli have become streptomycin resistant it will of course, by dissemination, only hasten the downhill course of the disease.

Tuberculin is given intrathecally as the protein purified derivative, known as P.P.D. and its administration is not without risk, for during a reaction which occurs from 12–48 hours after an injection, all the features of the disease will be exacerbated and very dangerous complications may occur.

We have, therefore, to consider the difficult question of which patients should receive P.P.D. in addition to streptomycin therapy. This must depend upon the facilities available and the experience of the physician. I believe that it may well be that in a few years time all cases of tuberculous meningitis will receive P.P.D. therapy as a routine. Until we are better able to assess its hazards, however, its use must be reserved for those cases who are unlikely to recover without it. Personally, I would give it to any patient with mental disorientation and physical signs of disease who did not show improvement after 2 weeks on streptomycin intrathecally, and certainly if the streptomycin did not produce a brisk cellular response. P.P.D. can be obtained from the Veterinary Laboratory of the Ministry of Agriculture and Fisheries at Weybridge, Surrey, and one shilling will purchase enough to treat several patients. It is customary to give an initial dose of .0000075 mg. in 1 c.c., and if no reaction occurs to double or treble this each second day until changes in the patient's clinical condition and fluid show that he has reacted. It is extremely easy to give the wrong dose and it has been found most convenient to have solutions made up according to the number of 0's before the .75 mg., *i.e.*, the initial strength is called five 0's and then four 0's. As a general rule two 0's strength is about the strongest used.

As soon as reactions occur 4 or 5 days should be left between each injection for the patient's general condition would be seriously undermined if these were to occur too frequently. When a reaction has occurred the dose is not of course increased further—it is probably wisest to lower it slightly for the next injection. If more than a week has elapsed between injections it is essential to lower the dose drastically as occasionally reactions of quite unexpected severity have been recorded in these circumstances. A reaction generally starts about 12 hours after an injection, and lasts about 24 hours. The initial symptoms may, however, be delayed as long as 48 hours. The pressure in the C.S.F. rises very dramatically and there is a great increase in cells, especially polymorphs, and protein. All the clinical features of the disease may be exaggerated. Hydrocephalic attacks with depression or complete cessation of respiration are, therefore, especially likely to occur during a P.P.D. reaction, so that no patient must ever be treated with P.P.D. unless burr holes have been made. The patient must be under continuous supervision and if respiration becomes shallow or slow, ventricular puncture with reduction of the pressure to atmospheric level must be carried out. Occasionally respiration may cease suddenly and so the nursing staff must be prepared to give artificial respiration until the ventricle can be tapped. For this purpose the Oxford Insufflator, which has been provided to accompany all iron lungs, is ideal. A sucker should also be immediately available as vomiting may be severe. Hyperpyrexia is another complication of a P.P.D. reaction and a close watch must be kept upon the temperature. The danger of an inhalation pneumonia will of course be increased during these periods, and prophylactic penicillin must be considered. I do not wish to imply that these complications are likely to occur every time a P.P.D. reaction is induced. It is generally possible to gauge the dose so that a considerable margin of safety is allowed, but the patient will always be more difficult to feed and if conscious will experience an increase in symptoms, and will have a spike of temperature. It is still too early to say how many P.P.D. reactions a patient should be given. They should be continued until the protein and cells are falling progressively to a new low level after each temporary exacerbation that the P.P.D. reaction causes, and until the patient is gaining weight. Intrathecal streptomycin should be continued for some time after the P.P.D. has been stopped.

In the present state of our knowledge it appears likely that a further 20 per cent. of all cases can be restored to health by the use of P.P.D. A small percentage of the remainder may recover after such severe cerebral damage has been caused by the disease that they exist as vegetables, a complication that is practically unknown when streptomycin alone is used. We do not yet know criteria which would appear to make a patient untreatable from the start, and with the possible exception of a patient in fully developed spastic quadriplegia all should be given their chance.

Good nursing care is, needless to say, of the utmost importance and the maintenance of the patient's nutrition, by intranasal feeding if necessary, the treatment and prevention of bedsores and the other problems which are inherent in the nursing of a comatose patient play a most important part in the likely outcome of each case. Patients who appear to have been cured must be followed up by repeated lumbar punctures for 2 years at least for the danger of relapse is ever present, even if a normal C.S.F. has been attained. It seems reasonable to suppose that P.P.D., by removing the tuberculous tissue in the meninges, may make relapse a much less likely event, but it is as yet too early to know whether this is in fact the case.

The fight against this disease is a fascinating experience, it taxes the skill, optimism and perseverance of all concerned, but it has its reward in seeing young patients restored to normal health from a disease which until a very short time ago had a universally fatal termination.

REFERENCES.

CATHIE, I. A. B., and MACFARLANE, J. C. W., 1950, *Lancet*, ii, 784.

SMITH, H. V., and VOLLUM, R. L., 1950, *Lancet*, ii, 275.

JOYCE GREEN HOSPITAL

The Annual Reunion and Prize-giving at Joyce Green Hospital will be held on Saturday, 7th July, 1951. Prizes will be presented at 3.0 p.m. Tea will be at 4.0 p.m. and sports at 5.0 p.m. All those who have been associated with Joyce Green Hospital will be welcome.

WISDOM

The green leaves of your apple tree
Hide you, O wise blackbird.
A shield, a lodging, for your wisdom
Looking down in calm on our fever.
Bright leaves of Spring, of the morning,
Conceal your complete form :
Austere garb, sweet line, beckoning call.

J.C.D.

SUCH IS FAME

An invoice recently received from the Cambridge Scientific Instrument Company Limited and addressed as below found its way to the appropriate recipient :—

Guy's Hospital, " Baker Institute," London Bridge, S.E.

Manners in Medicine

By M. MYER

BEHAVIOUR that shows sympathy for the feeling of others is the essence of good manners and good medicine. In principle, good manners in medicine differ not at all from good manners elsewhere. However, there are certain differences which exist by virtue of the unique character of the " doctor–patient " relationship.

The patient is not in his accustomed state. He may need reassurance or medicine in a bottle, but in both instances he needs the doctor's aid. He does not know in what form he requires that aid, nor indeed why he requires it. His ignorance is such that he is likely to be very uncritical of the advice which he is given. The layman's ignorance of his own body makes him very dependent upon the physician, whenever illness casts its shadow upon him ; dependence upon another is distasteful to most people, perhaps instinctively so, for with dependence there is an implied vulnerability and a threat to self-respect. The patient feels unwell, therefore his livelihood and his way of life are at stake. He has no knowledge of that which threatens him, how or from where the blow will come, nor how he will face it ; furthermore he is deeply conscious of that vulnerability and his loss of independence.

It is possible to distinguish two distinct components in the anxiety of sickness. There is the organic disease or fear of it, which undermines the body and brings a natural anxiety in its wake, and there is that more subtle anxiety which is incurred by the loss of independence and the threat to self-respect. The sick man needs advice, but because his self-respect is threatened he is peculiarly sensitive to the way in which it is given. He is sensitive to the condescending manner, to being hurried, to being disbelieved and to curt instructions. He is sensitive to the physician who appears preoccupied, and he is quick to resent being asked the same question twice ; he is sensitive to cold hands and cold comments.

The wise physician recognises these two components in anxiety, but others less graced are so obsessed with the diagnosis of organic disease and so diligent in their search for physical signs that the patient's self-respect is not only unconsidered but is further undermined. In these modern days of speed and hustle, when medical services are assessed in terms of patients per hour or patients per doctor, the temptation to make " spot diagnoses " is constantly increasing. When, after examining the patient, expecting to confirm such a diagnosis, the physician proves himself to be wrong, he is sometimes compelled to take a detailed history ! It must be the experience of many an anxious patient that he is required to give his history, not from a horizontal position, but chilled and without his trousers.

Consideration of the patient's feelings implies an understanding of those feelings. To analyse the behaviour of others, by ascribing to them motives which will account for their behaviour, will, as likely as not, lead to misunderstanding. Feelings are subjective and are not amenable to analysis by ordinary methods. The scientific method of controlled experiment, observation, interpretation and deduction, has no place here although it is the method in which the doctor has been taught to put implicit faith. Such are its limitations that it takes no account of those unknown variables—the pride, the deceit, the prejudice, the child-like trust and the false modesty which together subscribe to the " patient complex."

There is no short cut to understanding the patient. There are no rules nor a well-defined technique. It is an art which must be cultivated, for none are born masters of it. It is part intuition, part emotion, part experience and part imagination. In particular it requires understanding of self. All that any man can know of love and hate is what he has himself experienced. Without experience there can be no understanding.

The difference between physician and patient may be less than the latter imagines. It is mostly a matter of training. The doctor and the patient both have a capacity to respond in a similar way to similar stimuli—the capacity to behave according to the dictates of emotion rather than reason. The capacity to love or hate without good cause was once their common lot. That the doctor can dissociate himself from emotional attitudes, that he can refrain from emotional behaviour and can reason by scientific method, distinguishes him from the patient by a feature which should be wholly to his own advantage. Unfortunately it is not always thus. That which should be an asset, bought at great price by many years of study and careful practice, too often turns into a liability and bars the way to understanding the patient. For so many years has the physician been unwilling to think and act emotionally that his own experience of emotion is but a dim memory and he can no longer evalue it in others. In such circumstances sympathy cannot be established and without sympathy medicine is a wasted effort.

It is not enough that the physician should believe he understands a patient. The patient must believe himself to be understood. Without this assurance he will reserve his confidences for others, who seem more sympathetic ; meanwhile, he feels nervous and cannot relax. The history is difficult to obtain ; the physical signs are obscured. He will have little faith in the counsel he is given and, in fact, that counsel may well be inappropriate. He is certainly in no mood to follow advice with sufficient enthusiasm to be cured of his malady.

The patient expects sympathy from his physician and rightly so, for sympathy alone may be enough to cure. Any system of medical practice, which so hurries the patient and the practitioner that " sympathy " cannot be established, constitutes a degradation of medical ideals. Applied medicine is applied humanity—the exhibition of compassion, which is the meaning of " good manners."

[*The above essay wins the " Gazette " prize of £6 6s. No other essays were considered suitable for award.—Ed.*]

" The Constant Wife "

JUDGED by ordinary amateur standards the Guy's Theatre Club acquitted themselves most ably in their recent presentation of " The Constant Wife," by W. Somerset Maugham. The trouble has been that, in previous productions, they have done so much better than many professional companies.

In " The Constant Wife," their recent venture, the players showed at times a groping for words, as a result of which the tension of the play was not consistently maintained. In addition, certain of the players appeared to have no idea what to do with their hands and, in consequence, could not resist grasping the furniture. And speaking with one's back to the audience may well be unavoidable from time to time, but it is an attitude to be discouraged.

Yet this may be hypercritical. To the credit of those concerned the sets were most effective, the diction throughout was excellent and the full force of Maugham's wit put into every line. The make-up, too, was admirable, and the movement and grouping well-planned and executed.

In general then, we enjoyed this play and, if we do appear to find fault, it is only because we have come to expect Guy's players to have that ease and naturalness upon the stage which comes, in most cases, only after many years of strenuous training, followed by endless opportunities for assiduous practice.

M.F.

Occupational Therapy

By MARGARET W. BURGES, M.A.O.T.

THANKS to Passim a few weeks back some current illusions about Occupational Therapy may have been dispelled. Lest any still linger, we offer the following survey in the hope that it may be read, if not with interest, at least with open-mindedness.

Occupational Therapy means any occupation, physical or mental, which will help towards recovery. It does not necessarily mean the now regrettably traditional bits of weaving and basketry and needlework so often seen, although these, of course, have their uses.

The name Occupational Therapy is modern, but the principle has been recognised from time immemorial. About 2,000 B.C. the Egyptians had temples in which melancholics could indulge in " pleasurable occupations." This practice appears to have vanished with the fall of the ancient Egyptian civilisation. Yet the idea emerged from time to time, as in 172 A.D., when Galen said, " Employment is Nature's best physician and essential to human happiness." As century followed century, knowledge in the realms of medicine and surgery grew wider. Eventually, towards the end of the eighteenth and the beginning of the nineteenth centuries, the value of occupation for mental patients began to be recognised. At this time lunatic asylums were fearful places where the inmates were often chained in their cells and shown to a curious public like animals in a zoo. Conditions improved with the times and, today, most mental hospital patients are able to work at something, whether in the Utility or Occupational Therapy departments. Mental hospitals then, have never looked back as far as Occupational Therapy is concerned, but the physical side of the work was slower in starting. During the '14–'18 war, it was observed that the men recovered more quickly when occupied, rather than when idle. It was also noticed that function could be restored with greater ease and speed to injured joints and muscles by the use of carefully selected specific jobs. The idea was taken up in America, where the first training school was opened in Chicago in 1915. Over here nothing happened for a time, but the seeds had been sown and in 1930, the first English training school was founded, to be closely followed by another five years later. The Association of Occupational Therapists was instituted in 1936 and became responsible for setting the examinations. At first there were comparatively few students, but numbers increased steadily, and today there are seven training schools in England alone. The course for the Diploma takes from three to three-and-a-half years. Candidates are required to have a good knowledge of applied psychology, general medicine and surgery, departmental management, psychopathology, psychiatry, occupational therapy applied to psychiatric conditions, advanced anatomy and physiology, physical medicine and orthopædics, occupational therapy applied to physical conditions, as well as approximately ten different handicrafts. It is possible to specialise in either psychological or physical work, or to take the dual qualification. It has been said that all this medical knowledge is unnecessary, but it would be difficult to prescribe the optimum occupation for any given patient without it.

So much for the general history of Occupational Therapy ; now a word about its advent in Guy's. During the '39–'45 war (and still for that matter) Guy's patients were able to benefit from Occupational Therapy at both Pembury and Orpington, the latter department opening in 1941. Later on, a department started in the York Clinic and, being the only one in Guy's itself, led to the erroneous idea that Occupational Therapy is primarily for psychotic and neurotic patients. Gradually patients in the Hospital began to be written up for " O.T.", and in June '48 work was started in Caleb and Diplock Wards as well as with other cases in the hospital. When the L.C.C. teachers came nearly a year later, Caleb and Diplock were relinquished, and by this time there were many more cases in the rest of the Hospital. The department continues to be housed in the York Clinic, but patients are treated wherever they are written up. Little specific orthopædic work can be done owing to lack of space and the fact that most of these cases are still at Orpington. Patients can only be accepted on a doctor's recommendation, and the backing of the medical staff is a necessity (not always, alas, enjoyed !). Patients can be written up for various reasons, either physical or psychological.

Since the new Health Service made free treatment available to all, the criticism has sometimes been made that Occupational Therapy calls itself a treatment but patients must pay for the articles made. In answer it may be said that the making of the article is the treatment. If, when it is finished, the patient wishes to purchase it, he has the first right to do so—at cost price. If not, it is returned to the department and sold at the annual Sale of Work or at any other time. If a patient is genuinely unable to afford his work, arrangements can always be made for him to have it, either with the help of the almoner or by other means. It should be appreciated that goods offered for sale cannot always be well made, as they are frequently first attempts.

The following cases have been chosen from the O.T. department's records with a view to showing some of the treatments which can be offered to individual patients suffering from different complaints. In prescribing the work the Occupational Therapist first considers the disease, together with special recommendations from the doctor, if any, and then the individual patient. This leads to a certain choice being available to the patient in most cases.

CASE A. Young man with fracture-dislocation of vertebra (C.6). O.T. was required for finger and hand movements.

> *O.T. given.* 1. Cord knotting with large shuttles to facilitate grip. 2. Netting to give wider movement of hand and arms. 3. Leatherwork—punching holes to strengthen grip, thonging for precision movements. *Result.* Satisfactory.

CASE B. Middle-aged woman with hemiplegia following cerebral hæmhorrage. O.T. was required to restore and strengthen simple movements.

> *O.T. given.* 1. Thonging for precision movements. 2. Peg Solitaire Board to encourage picking up small objects. *Result.* Improvement.

CASE C. Man, aged 29, with pulmonary tuberculosis. O.T. was required to alleviate boredom, to prevent worry and to employ profitably long period of inactivity.

> *O.T. given.* 1. Embroidery, at own request. Light work suitable for early stages of recovery. 2. Shorthand—useful subject for use when better. 3. Basketry—handicraft to provide variety. *Result.* Patient made good progress in shorthand and intended to continue after discharge ; basketry found to be interesting hobby.

CASE D. Elderly woman with depression (slight agitation). O.T. was required to take mind off self and to help to restore confidence.

> *O.T. given.* 1. Simple leatherwork—small article, quickly finished, to prove capability. 2. Weaving—soothing occupation with a certain rhythm. 3. Social activities, games, etc. This patient also enjoyed borrowing reproductions from the Department's picture library. *Result.* Satisfactory.

All patients are not eager to have Occupational Therapy. In one of his "Essays," Elia expresses many a patient's attitude. "The summons (in his case, to write the essay), unseasonable as it appeared, seemed to link me on again to the petty businesses of life, which I had lost sight of, a gentle call to activity, however trivial, a wholesome weaning from that preposterous dream of self-absorption—the puffy state of sickness—in which I confess to have lain so long, insensible to the magazines, and monarchies, of the world alike, to its laws and to its literature." Like Elia, many patients come to recognise the value of their occupations.

In common with other treatments, Occupational Therapy is not always successful and, being still in its early days, has many difficulties to meet and prejudices to overcome. Nevertheless, with knowledge comes understanding. The Occupational Therapist is now generally deemed to be worthy of inclusion in the hospital team whose aim, after all, is the alleviation and cure of disease

Reviews

Prefrontal Leucotomy. By MAURICE PARTRIDGE. Blackwell. *Price* 42*s*.

This book is delightfully written and is a contribution of the first order to the subject of prefrontal leucotomy. It consists of an account of a clinical investigation of 300 patients who were subjected to detailed study by the author, both before and after operation. This clearly involved an immense amount of labour, since to obtain the required information he had to travel over 60,000 miles during the course of the investigation, and the maintenance of the informal approach must at times have strained his tact and patience to the utmost.

In the earlier chapters Dr. Partridge discusses operative technique, the immediate complications and sequelæ, preliminary considerations with regard to changes at the psychic level and the post-operative personality as a whole. The ensuing chapters are concerned with an analysis of the results of operation in various diagnostic groups. Detailed case histories are skilfully woven into the text, and there is a classified bibliography at the end. M.J.P.

Progressive Professional Nursing. By MONA E. GREY. Livingstone. *Price* 6*s*.

In a short concise book the author has given a broad view of nursing in all its aspects, from its earliest origins to present day conditions.

The book is original in its conception, interesting and most informative. Special attention should be drawn to the striking pictorial frontispiece showing at a glance the wide field covered by the professional nurse and the opportunities open to the student. L.R.S.T.

Modern Surgery for Nurses. By F. WILSON HARLOW. Heinemann. *Price* 25*s*.

The value of this textbook for nurses is well established. The second edition maintains the high standard of its forerunner; a simple, concise presentation of facts giving the nurse a sound basis upon which she can enlarge from her own experience.

The additional subject matter concerned with the sulphonamides and antibiotics and the revised chapter on X-ray diagnosis will be especially useful to the more senior nurse.

The clear diagrams and photographs are a good amplification of the text and the book is well produced. M.G.S.

Handbook of Child Health. By A. FURNISS. Sylviro Publications. *Price* 25*s*.

This book would be better titled " Handbook of the School Health Service " even though it takes a wide view of the care of school children.

Pædiatricians and family doctors would both do well to read it, for they will learn of the valuable services available for helping children and it will correct the distorted view which follows from seeing children only in hospital out-patient departments or surgeries.

It is not particularly easy to read continuously; sometimes the writing is hurried and not clear. It will, however, be found a most useful manual to have on the desk for reference and for help in dealing with the varied problems in child care that come to doctors for solution. R.C.M.

The Technique of Contraception. By HELENA WRIGHT. Churchill. *Price* 6*s*.

This little book describes clearly and briefly the various methods of birth control. It is written for doctors who may find themselves called upon to give advice on this subject and who might prefer to treat the patient personally rather than send her off to yet another clinic. The information is clear, and the instructions are easily followed. This book will add to the reputation of Dr. Wright, whose earlier work, " The Sex Factor in Marriage," has helped so many people. The book is unreservedly recommended. R.E.I.

Practical Periodontia. By H. MURRAY-ROBB. Oxford. *Price* 21*s.*

This small book (120 pages) deals with the practical application of the researches into Periodontitis as advanced by Box at Toronto University.

It can hardly be recommended to the Dental Student, as so many theories and their applications are at variance with the English approach to this study. Ionisation as a method of treatment finds little or no support in this country and its efficacy must be viewed with doubt.

A thoughtful approach is developed regarding the care of the mouth in the home and the beneficial results of correct tooth brushing, massage and oxygen therapy are stressed. The dental practitioner will find in this work many stimulating ideas which are worth consideration.

Dental Practice Management. By S. L. DRUMMOND-JACKSON. Staples. *Price* 30*s.*

The author has successfully produced a book which will prove extremely valuable to all young practitioners as they are about to enter practice. The problems of assistantships, partnerships and practice management are well covered. The book also contains such information that will guide all practitioners with the task of organising their surgery workshops, accounts and records. It is the most comprehensive book on this subject and will prove useful to all concerned.

The National Health Scheme has made some of the text redundant, particularly with regard to the financial aspects of private practice. There must, however, be few practices which are fully occupied with yellow forms and would not benefit from this clear-thinking and business-like approach.

Dental Surgery and Pathology. By T. W. and E. V. WIDDOWSON. Staples. *Price* 63*s.*

There are a few books in every profession which are outstanding: in dentistry, this is one of them.

This edition (4th) is, as claimed by the authors, essentially a book of reference and it's 700 pages cover practically every aspect of Dental Surgery from fractures to anæsthesia. It is excellently illustrated both with drawings and with photomicrographs. The text, although somewhat concise, is adequately descriptive.

The chapter on the treatment of irregularities of the position of the teeth is up-to-date and ably covers many general orthodontic problems.

Some of the illustrations are unnecessary and some even historical (*e.g.*, four-tail bandages) as are also the passages on treatment of parodontial disease by vaccines or ionisation therapy. No mention is made of the advantage of tooth splitting when removing unerupted canines in the palate, or horizontally placed lower third molars. But, on the whole, this is a very good book.

Handbook of Electroencephalography. By ROBERT S. OGILVIE. Addison Wesley Press.

This is a revised edition of a handbook for E.E.G. technicians originally published in 1945. The author himself is an experienced technician and has set out the subject matter of his book in such a manner as to be both clear and helpful to beginners. The three main chapters are concerned with the setting up of an E.E.G. laboratory, electrode placements, and the taking and interpretation of E.E.G. tracings. A number of quite adequate illustrations are included, but the section on the principles of electronics in the appendix does not go beyond the most elementary stages and could profitably be enlarged.

M.J.P.

Practical Procedures in Clinical Medicine. By R. I. S. BAYLISS. Churchill. *Price* 25*s.*

This is a new book devoted to the application and interpretation of those techniques used in medicine for diagnostic and therapeutic purposes which are normally carried out by the house physician. This aim is lost in places by describing in detail a number of methods where one would be sufficient for the purposes in mind and too little stress is laid on those quick diagnostic tests required in medical emergencies when a small laboratory is available. The physiological principles behind each investigation are discussed so that each may be appreciated on a rational medical basis. It is a book to be recommended to senior students and house physicians when performing these techniques for the first time.

P.P.

Sport

CRICKET

Guy's C.C. *v.* Beddington C.C.

At Beddington. Result—Lost by 169 runs
6th May, 1951

Guy's 62. Beddington 231–5 dec.

Guy's

D. E. Blake, c. Reeves, b. Loader	4
D. M. E. Allan, c. Reeves, b. Loader	4
D. Lipington, c. Bowles, b. Reeves	21
N. Cooke, b. Halfyard	0
D. Tunnadine, c. Bowles, b. Loader	1
W. J. Howells, c. Halfyard, b. Reeves	7
H. Bissoon Dath, c. Terry, b. Reeves	9
E. Gibbons, c. Reeves, b. Tessier	3
P. Russell, b. Reeves	1
M. Williams, not out	3
M. Lyon, b. Reeves	5
Extras	4
	62

Bowling : M. Lyon, 11-0-73-3 , N. Cooke, 5-0-20-0 ; D. Allan, 107-0-48-2 ; P. Russell, 5-0-19-0 ; D. Tunnadine, 4-0-19-0 , M. Williams, 2-0-21-0 ; H. Bissoon Dath, 3-1-26-0.

Guy's C.C. *v.* Honor Oak C.C.

At Dulwich. Result—Lost by 118 runs
12th May, 1951

Guy's 123. Honor Oak 241–4 dec.

Guy's

D. Blake, c. Harris, b. Sheffield	37
D. M. E. Allan, c. Eastman, b. Sheffield	33
H. Bissoon Dath, l.b.w., b. Sheffield	9
W. J. Howells, c. Alexander, b. Sheffield	0
J. Riley, b. Bynde	4
H. Meyer, b. Sheffield	0
A. Cahill, b. Cheeseman	19
J. J. Hall, c. & b. Bynde	0
M. Willis, b. Cheeseman	15
M. Williams, st. Mulley, b. Sheffield	0
E. R. Gibbons, not out	0
Extras	6
	123

Bowling : M. Williams, 11-1-49-2 ; J. Riley, 5-0-26-0 ; D. M. E. Allan, 13-1-56-0 ; H. Bissoon Dath, 6-0-28-0 ; M. Willis, 7-0-43-0 ; M. Gibbons, 8-0-39-2.

Guy's C.C. *v.* Ashtead C.C.

At Ashtead. Result—Won by 7 runs
13th May, 1951

Guy's 191–7 dec. Ashtead 184

Guy's

D. Blake, c. & b. Barnard	61
D. Lipington, c. Palmer, b. Barnard	3
R. Gibbons, c. Leslie, b. Robertson	56
D. Allan, c. Robertson, b. Barnard	24
D. Tunnadine, run out	5
E. Graham, run out	1
W. J. Howells, c. Edwards, b. Barnard	14
A. Cahill, not out	9
M. Williams did not bat	
M. Willis ,, ,, ,,	
R. Riley ,, ,, ,,	
Extras	18
	191

Bowling : M. Williams, 2-0-13-0 ; M. Gibbons, 2-0-13-0 ; D. Allan, 8-0-61-1 ; E. Graham, 9-1-57-3 ; D. Tunnadine, 7-0-32-2 ; M. Willis, 5.5-4-6-4.

Guy's C.C. *v.* Crofton Park C.C.

At H.O.P. Result—Lost by 7 wickets
14th May, 1951

Guy's 209. Crofton Park 212–3

Guy's

D. Blake, c. & b. Calder	115
D. M. E. Allan, b. Calder	5
D. Lipington, c. Orford, b. Calder	0
D. Tunnadine, st. Orford, b. Bishop	30
E. Gibbons, c. Orford, b. Bishop	3
H. Bissoon Dath, l.b.w., b. Bishop	4
W. J. Howells, l.b.w., b. Calder	12
E. Graham, b. Calder	0
G. Scott, b. Calder	6
M. Willis, b. Calder	3
F. Trist, not out	23
Extras	8
	209

Bowling : F. Trist, 14-3-28-1 ; D. Tunnadine, 12-1-41-1 ; E. Graham, 15-0-53-0 ; M. Willis, 10-0-28-0 ; D. Allan, 7-2-14-0 ; H. Bissoon Dath, 3-0-16-0 ; E. Gibbons, 2-0-8-0 ; W. J. Howells, 5-0-14-1.

Guy's C.C. *v.* Stoics C.C.

At H.O.P. Result—Draw
16th May, 1951

Stoics 182–4 dec. Guy's 150–7

Guy's

N. Cooke, b. Dixon	6
D. Lipington, st. Parnaby, b. Malcolm	19
D. Tunnadine, st. Parnaby, b. Malcolm	21
J. Riley, c. Regan, b. Robinson	23
P. Pickett, b. Malcolm	11
D. Allan, c. Bromage, b. Robinson	25
M. Williams, not out	13
W J. Howells, b. Davies	30
H. Bissoon Dath, not out	0
E. Gibbons did not bat	
M. Lyon ,, ,, ,,	
Extras	2
	150

Bowling : M. Lyon, 9-0-33-1 ; D. Tunnadine, 3-0-21-0 ; N. Cooke, 6-1-20-1 ; P. Pickett, 13.4-3-54-1 ; M. Williams, 3-0-11-0 ; D Allan, 10-0-41-1.

LAWN TENNIS

1st VI *v.* Winchester

Away. Result—Lost 3—5
14th April, 1951

1st VI *v.* Imperial College

Away. Result—Lost 4—5
28th April, 1951

1st VI *v.* Lloyds Bank

Away. Result—Draw 4—4
12th May, 1951

1st VI *v.* City of London Police

At H.O.P. Result—Lost 1—3
16th May, 1951

1st VI *v.* Paddington

Away. Result—won 6—3
19th May, 1951

2nd Round Inter-Hospitals Cup, 1951

Guy's *v.* St. Bart's.

At H.O.P. Result—Won 8—1
23rd May, 1951

House Appointments

1st JUNE, 1951

ASSISTANT HOUSE SURGEONS.

To Mr. Slesinger : Mr. J. C. Gazet.
,, Mr. Wass : Mr. J. W. Goodfellow.
,, Mr. Blackburn : Mr. G. A. E. Baker.
,, Mr. Lawrie : Mr. D. J. Stoker.
,, Mr. Glover : Mr. E. J. Masters.

Appointed for six months, the first three months as A.H.S.

OUT-PATIENT OFFICERS.

Mr. J. R. Rees.
Mr. J. C. C. Kendall.
Mr. W. Vans Agnew.
Mr. J. H. Bailey.
} 3 *months.*

HOUSE SURGEONS.

To Sir Heneage Ogilvie: Mr. J. Scorey. 6 *months.*

,, Mr. Massie : Mr. D. R. Pugh. 3 *months.*

,, Mr. Eckhoff : Mr. P. H. Kendall. 6 *months.*

,, Mr. Atkins . Mr. P. L. Williams. 3 *months.*

HOUSE PHYSICIANS.

To Sir John Conybeare Mr. J. H. Wilson.
and Dr. Hardwick: Mr. N. S. Galbraith.
3 *months.*

,, Dr. Boland and Mr. J. A. C. Bamford.
,, Dr. Baker : Mr. J. Kelsey Fry.
6 *months.*

,, Dr. Hampson and Mr. I. B. Thomas.
,, Dr. Kauntze : Mr. B. H. Bass.
6 *months.*

,, Dr. Douthwaite and Mr. J. Taylor.
,, Dr. Mann : Mr. J. M. D. Hooper.
3 *months.*

RESIDENT OBSTETRICIANS.

1.1.51—30. 6.51 : Mr. P. J. Dwyer.
1.3.51—31. 8.51 : Mr. P. S. B. Russell.
1.5.51—31.10.51 : Mr. A. W. Cook.
1.7.51—31.12.51 : Mr. W. H. Watson.

OPHTHALMIC HOUSE SURGEON.

Mr. I. G. Johnston. 3 *months.*
(Non-Resident)

THROAT AND EAR HOUSE SURGEON.

Mr. S. H. Richards. 3 *months.*

DERMATOLOGICAL HOUSE PHYSICIAN.

Mr. J. M. Palmer. 6 *months.*
(Non-Resident)

NEUROLOGICAL HOUSE PHYSICIAN.

Mr. R. Goulding. 3 *months.*

GENITO-URINARY HOUSE SURGEON.

Mr. A. W. R. Williamson. 6 *months.*

CHILDREN'S HOUSE PHYSICIANS.

Mr. G. N. St. J. Penney. 3 *months.*
Mr. K. W. Gray. 6 *months.*

HOUSE SURGEON TO THE THORACIC UNIT.

Mr. C. N. Watson. 6 *months.*

HOUSE SURGEON TO THE NEURO-SURGICAL UNIT.

Mr. D. B. Amos. 3 *months.*

RESIDENT JUNIOR CLINICAL PATHOLOGISTS.

1.4.51—30. 9.51 : Mr. D. G. Chalmers.
12.4.51—11.10.51 : Mr J. T. Cecil

HOUSE PHYSICIANS IN THE YORK CLINIC.

1.3.51—31. 8.51 : Mr. J. A. J. Smith.
1.5.51—31.10.51 : Mr. J. L. Hayward.

RESIDENT ANÆSTHETISTS.

20.3.51—19. 9.51 : Mr. J. V. Kilby.
12.5.51—11.11.51 : Mr. R. J. Vale.

ORPINGTON HOSPITAL.

General House Surgeon.
Mr. T. G. Thomas.

Throat and Ear House Surgeon.
Mr. H. V. Hoyle.

Orthopdæic House Surgeon.
Mr. J. C. Jelleyman.

JOYCE GREEN.

House Surgeon. Mr. R. D. P. Druitt.
House Physician. Vacant.

PEMBURY.

House Surgeon. Mr. T. G. L. Bellis.

QUEEN MARY'S, SIDCUP :

House Surgeons. Mr. W. M. E. Tweed.
Mr. A. R. Phillips.

SOUTHERN.

House Surgeon. Mr. A. G. Spooner.
House Physician. Mr. E. P. W. Tatford.

Hospital Information, etc.

APPOINTMENT VACANT

Applications are invited for the appointment of **Junior Lecturer in Pharmacology,** commencing on or before 1st October, 1951. Salary scale £600 to £750 per annum with superannuation and family allowance. Application should be made on a form to be obtained from the Dean, and lodged not later than **15th June, 1951.**

PASS LIST

ROYAL COLLEGE OF SURGEONS OF ENGLAND

Primary F.D.S.
April, 1951

G. C. Blake
P. C. Grummitt
S. P. Johns
C. H. Kidner
H. G. Poyton

UNIVERSITY OF LONDON

Third (M.B., B.S.) Examination for Medical Degrees

April, 1951

Honours

G. A. E. Baker
Distinguished in Medicine

Pass

D. B. Amos
T. G. L. Bellis
B. L. Bisley
J. C. Camac
D. J. Cliffe
F. J. Covill
D. M. Devane
G. Dixon
R. D. P. Druitt
G. W. Edward
J. W. Goodfellow
G. C. A. Holden
J. M. Holden
H. V. Hoyle
W. V. James
J. V. Jeffs
T. D. Kellaway
J. C. C. Kendall
P. H. Kendall
P. J. Koblenzer
D. M. Lewis
M. Lewis
K. E. MacLachlan
E. J. Masters
J. M. Medlock
R. C. Nauth-Misir
P. M. J. O'Brien
J. N. Pachmayr
S. A. C. Paget
J. Palmer
A. R. Phillips
W. J. Pryn
S. H. Richards
D. L. Rugg-Easey, B.D.S.
P. S. B. Russell
J. A. Rycroft
G. C. Saint
A. G. Spooner
R. V. Steward
D. J. Stoker
E. P. W. Tatford
C. W. Taylor
I. B. Thomas
T. G. Thomas
J. A. Thornton
W. M. E. Tweed
A. H. Walker, Ph.D.
L. Wollner
K. G. Worms, B.Sc.

Part I

T. K. H. Boenheim
J. W. Comper
M. J. Craft
H. Gold
E. T. Johns
G. Karpusheff
P. F. P. Lansdowne
D. T. Lovell
M. M. Lubel
I. H. Maine
P. L. Pelmear
J. R. Robinson
E. J. Rolls, B.Sc.(Eng.)
R. S. Wells
C. H. Wilkinson
J. Woodford
P. A. Zorab

Part II

R. J. O. Catlin
K. V. Cooper
G. H. Fisch
J. C. Gazet
W. Sewell
J. Woodford

Part III

J. W. Comper
J. C. Jelleyman
I. H. Maine

Diploma in Psychological Medicine

J. A. Irwin
A. A. Cashmore G. F. Vaughan

HOSPITAL GARDEN PARTY

June 20th, 1951

As announced in the last issue of the *Gazette*, a Garden Party will be held in the grounds of the Hospital on Wednesday, June 20th, at 3.0 p.m. A limited number of tickets will be available for old Guy's men, and the Superintendent would be glad to hear from any old Guy's man who would care to receive an invitation.

THE BEANEY SCHOLARSHIP

Applications are invited for **The Beaney Scholarship** in Materia Medica which becomes vacant on 1st October, 1951. Candidates for the Scholarship must have received part at least of their medical education at Guy's Hospital Medical School. The object of the Scholarship is to advance knowledge of Materia Medica (including Pharmacy, Pharmacology and Therapeutics) by supplying the scholar with the means of carrying on original investigation in these subjects. The scholar holds the Scholarship for three years and is eligible for re-election. The Scholarship is of the value of approximately £75 per annum. Applications should be made not later than **26th June, 1951,** on a form to be obtained from the Dean, Guy's Hospital Medical School, London Bridge, S.E.1.

APPOINTMENTS

UNIVERSITY OF SHEFFIELD

D. H. E. Harding has been appointed Reader in Pathology.

UNIVERSITY OF MANCHESTER

C. F. Brockington has been appointed Professor of Social and Preventive Medicine.

CHANGES OF ADDRESS

Charles Baker, Esq., O.B.E., M.D., 95, Harley Street, London, W.1, and The Warden's House, Guy's Hospital. Tels.: Welbeck 4772 and Hop 0353.

F. B. Sartory, Esq., M.R.C.S., L.D.S., "Ravensden," 24, Stafford Road, Wallington, Surrey. Tel.: Wallington 1049.

R. G. O. Tayler, B.A., M.B., B.Chir., D.R.C.O.G., Rentell Farm Cottage, Bletchingley, Surrey.

BIRTHS

BRONSDON.—On May 9th, 1951, to Joan (née Mizen), wife of Noel P. Bronsdon, M.R.C.S., L.D.S.—a daughter (Sheila Kim), a sister for Anthony.

HOUSDEN.—On May 10th, 1951, at Lorne House, Kingsland, Herefordshire, to Pamela, wife of Charles Housden, L.D.S., R.C.S.—a son (Robert Tilleard), a brother for Caroline.

PHILLIPS.—On May 15th, 1951, at Eddystone Nursing Home, Southsea, to Valerie (née French), wife of Surg.-Lt.(D) G. Phillips, R.N.V.R.—a daughter (Deborah Clare).

TAYLER.—On May 15th, 1951, at Guy's Hospital, to Elizabeth (née Wilkinson), wife of Robert G. O. Tayler, B.A., M.B.(Cantab.)—twin sons (Peter and David).

MARRIAGES

KELSEY-FRY—CASEY.—On April 4th, 1951, at St. Joseph's Church, Sundridge Park, Kent, Ian Kelsey-Fry, B.M., B.Ch., to Maureen J. Casey, S.R.N.

EDS. {R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1641 16*th June* 1951 *Ninepence*

PASSIM

To the majority of people industrial medicine represents yet another branch of specialised study, in which weird diplomas are occasionally awarded to apparently perverted individuals, in which a sinister delight is taken by particular examiners and the application of which is limited to a few nameless and obscure factories in the murky regions of the north and midlands. But since very few members of the community can nowadays lead an entirely natural existence and since so great a part of their waking time is spent in some sort of artificial occupation, the relationship of their health to their vocational surroundings and to the materials which they are compelled to handle becomes a matter of both direct and immediate importance.

In the halcyon summer days which some of us have enjoyed recently, when in the countryside the leaves sway listlessly on the trees, the air is hazy with heat, the farm-stock are found in the shady corners of the fields whisking off flies with their tails and all seems at peace in the world, we tend to picture the rural practitioner, lazily driving along the country lanes, with but an occasional accident or confinement to occupy his professional attention and the prospect of a pleasant evening's tennis as soon as his surgery is finished. Yet, just over the very hedge of the lane down which he is driving, a farm tractor with monotonous drone marks linear patterns over a field of young corn. The purpose ? Weeds are being sprayed with lethal intent and the chemical used hangs as a fine mist in the air before descending on the plants. Some cunningly-devised chemical—parathion, D.N.O.C., M.C.P.A., or other queerly-labelled product, is bringing death to obnoxious weeds. The question is, how many of the workers handling these fiendish concoctions are likely to find themselves in the condemned category. Or are they automatically immune ? The answer is, only last summer two men engaged in such spraying lost their lives.

It is good to know that " An experiment has been laid down by Prof. Blackman at the Ministry's Experimental Husbandry Farm at Martyn Horthy, near Winchester, covering the application of D.N.O.C., M.C.P.A., and others of the same families . . . in which the after-effects on crops, soil and so forth will be studied."

Meanwhile, the medical profession must be constantly on its guard. All credit to the M.R.C. and other interested departments for pursuing critical investigations into these and allied studies. These alone, however, are not enough. The practising doctor must be kept *au fait* with the latest developments and conclusions. Students should be brought to realise the full implications of these new exigencies and not be content with a vague acquaintance with lead colic, arsenical dermatitis and carbon monoxide poisoning. General practitioners, notably those in rural areas, should be kept informed, so that they may recognise at once any of the new medical emergencies and be equipped at the same time to institute prompt and appropriate treatment. The B.M.A. is alive to this present state of affairs. The hospitals and medical schools are faced with a new responsibility.

Copies of " Sherlock Holmes and Dr. Watson—A Medical Digression," by Dr. J. Maurice Campbell, recently reprinted in the *Gazette*, are obtainable now from the *Gazette* Office in book form at 2*s*. each.

Wrist Injuries

By JOHN ADDISON, F.R.C.S.

An analysis of a thousand cases of fractures about the joint, with some remarks on the common lesions.

OVER a sixth of the patients attending the fracture department have injuries of the bones about the wrist joint. A thousand consecutive cases, of which there are full records, have been reviewed. These fractures were either in the carpal bones or the distal two inches of the radius and ulna, their position and frequency being shown in Table I. The more important groups will be considered and reference made to some of the problems encountered in dealing with them.

TABLE I.

1,000 Cases of Fractures about the Wrist.

Fractures through the lower end of radius.		
Suprastyloid fractures (posteriorly displaced) (Colles)	460	
Metaphyseal fractures	211	
Epiphyseal separations	60	
Radial styloid fractures	45	
Posterior marginal fractures	22	
Vertical crack fractures	12	
Anterior marginal fractures	9	
Suprastyloid fractures (anteriorly displaced) (Smiths)	5	
		824
Fractures through the lower end of ulna.		
Fractures of the styloid process	8	
Fractures of the neck of ulna	4	
		12
Fractures of carpus.		
Scaphoid	97	
Cuneiform	52	
Semilunar	4	
Trapezium	2	
Magnum	1	
Unciform	1	
Pisiform	1	
Fracture dislocations (intercarpal)	3	
Dislocations of carpus	2	
Dislocation semilunar	1	
		164
Grand Total		**1,000**

The incidence of each injury approximates closely to that of other series (Eliason, 1925) and gives a fair indication of the relative frequency with which these injuries occur.

Suprastyloid Fracture (Colles):

This was easily the commonest type of injury with maximum occurrence among females in the older age groups. This fracture was described by Abraham Colles in 1814. It had possibly been previously described in other countries, but in England custom has sanctioned the use of this title. Far less commendable is the addition of such terms as "atypical" and "reversed" which merely add confusion to euphemism. The fracture with which we are dealing here is remarkably constant in position. The fracture line is from half to one inch above the radio-carpal joint, tends to be convex distally, medially is usually just proximal to the lower radio-ulnar articulation and laterally is suprastyloid in position. Indeed " suprastyloid " is probably the best descriptive term for this lesion. (Eliason, 1925). Variations from the standard form include verticle fissures running into the distal radial articular surface, or upwards into the diaphysis. More often than not the ulnar styloid is fractured. Rarely, the injury may be compound—although there was no example of this in the present series. Displacement of the distal fragment may not be evident radiographically or varies from a minor tilting to gross loss of continuity. The four elements present in varying degrees are : dorsal displacement, dorsal tilt, radial displacement and a supination twist. The importance of this last element has been stressed by Lambrinudi (1938) and Mayer (1940), and it is implied in the emphasis given to pronation in the methods of reduction of Robert Jones and other authorities. The treatment of this important group and the results achieved are considered later.

Metaphyseal Fracture :

This is an injury of the distal two inches of the radius and ulna or of the radius alone. It occurs in children only and is practically always incomplete (greenstick). The younger the child, the nearer the fracture line is to the wrist. When both bones were broken the ulnar fracture was usually distal to that of the radius. Only a small proportion showed gross displacement, buckling or concertina-like collapse of the radial fracture line being most frequent.

Two features of this injury are worth noting. Firstly, when the fracture is at high level, there is a tendency for the angulation to increase during immobilisation—and the deformity does not correct with subsequent growth. Secondly, refracture is liable to occur at the same site four to six weeks after the original injury. For these reasons, all but the most insignificant displacements should be corrected, the fracture being made complete in most instances. Immobilisation in plaster should be continued for six weeks where only the radius is fractured and eight weeks when both bones are involved. These fractures are best held in the pronated position, and in those at the higher levels the plaster should be continued above the flexed elbow.

Epiphyseal Separations :

This is the adolescent counterpart of the suprastyloid fracture. As with lesions of the scaphoid and radial styloid, it is much more common in males than females. Not only is the epiphysis with the growth plate displaced, but characteristically, it carries with it a small fragment of bone from the dorsum of the metaphysis. Reduction is often difficult, and if attempted a few days after the injury, may prove impossible. Fortunately, a considerable degree of displacement is acceptable as, with growth, the bone is remoulded to a normal contour. In only one instance in the 60 cases here recorded, did any marked degree of deformity persist.

Radial Styloid Fractures :

Only a small proportion of the wrist injuries are of this pattern. Displacement may not be present and is never severe, except when there is an associated carpal dislocation, and here the fracture is of secondary importance.

Carpal Injuries :

The bulk of these affected the scaphoid or cuneiform.

Scaphoid Fractures :

These are fractures of young people, the majority occurring in the second and third decades. A third were in patients under twenty-one, and five were found in children of ten years of age. Their anatomical position varied as shown in Table II.

TABLE II.

Anatomical position of 97 fractures of the carpal scaphoid.

Waist	69
Tuberosity	19
Proximal Pole	9

Fractures of the tuberosity are produced by tension applied to the radial collateral ligament, the small fragment of bone being avulsed. They heal well and rapidly with three weeks immobilisation by a dorsal slab.

The well-known complications of avascularity, non-union and carpal arthritis make the treatment of fractures through the body of the bone an important and difficult problem. A clinical diagnosis based on the history of an injury of an appropriate nature, swelling and tenderness localised to the snuffbox, and restriction of movements by pain, particularly dorsiflexion and ulnar deviation, calls for careful X-ray examination. Films must be taken in four positions. The essential views are: antero-posterior with the hand in ulnar deviation, and an oblique view of the carpus. The two standard positions, antero-posterior and lateral, frequently fail to show a fracture which is visible when the bone is well demonstrated in the other positions. If the first X-ray is negative, it should be repeated in three weeks, during which time the wrist is immobilised by a dorsal plaster slab. Should the second X-ray still show no fracture, little time has been wasted, and it is better to be safe than to delay early efficient treatment. For a fracture proved radiologically, full immobilisation with the wrist in the "punching" position (*i.e.* about 10; of palmar flexion and 15° of radial deviation) and the thumb included to the interphalangeal joint, must be maintained for a minimum of ten weeks. Union is judged solely by X-rays; there must be no sign of a fracture line in any view. The statement sometimes made that non-union of the scaphoid gives no trouble is incorrect—sooner or later strain of the non-union site or osteo-arthritis leads to disability which may be severe.

The answer to these problems is prophylactic—early diagnosis and early, thorough treatment.

Cuneiform Fractures:

This group formed the second most common carpal injury. Lateral and oblique films of the carpus may need to be examined carefully to define the small chip raised from the dorsum of the bone. In all cases, the lesion gave the appearance of being an avulsion injury. The fragment is probably pulled off with the distal attachment of the posterior radio-carpal ligament, the strongest fibres of which run obliquely from the region of Lister's tubercle to the back of the cuneiform and are rendered taut by palmar flexion or forced external rotation of the radio-carpal joint.

Clinically, the lesion is characterised by pain and tenderness, which is maximum over the lateral part of the back of the wrist. There may be a little swelling. Such fractures heal well with three weeks immobilisation by a posterior slab, and leave no disability.

All the common lesions fall into the above categories. Marginal chips of the radius, vertical fissure fractures, and the anteriorly displaced suprastyloids (Smith's) are comparatively rare. Fracture of the distal end of the ulna by itself is uncommon and is usually the result of a direct blow on the medial side of the wrist. Isolated fractures of the other carpal bones, dislocations of the radio-carpal joint and intercarpal dislocations, complete the total. There were six individuals who sustained bilateral fractures; no other multiple lesions were recorded.

Etiology:

The etiological factors may be grouped under two headings: the trauma and the patient.

The Trauma: The majority of all types of wrist injuries were due to falls on the hand, "back fires" and direct blows of other sorts accounting for a smaller number. No fracture appeared to be solely caused by any specific accident, although as one would expect, certain lesions were more common with particular injuries. Thus, of the 97 scaphoid fractures, only six were due to " back fires," although this particular injury was responsible for 11 out of 45 of the fractures of the radial styloid.

The Patient : All important in determining the type of fracture is the position of the wrist at the time the trauma acts. This will depend on the circumstances of the accident, and also on the way in which the patient falls. The baby tumbling from a high-chair, the inebriate bargeman missing the steps, the " office cleaner " slipping on the frozen paving of London Bridge—each falls differently. The tensile strength of the tissues, bones, ligaments, muscles and tendons, which vary with the age, sex and physical state of the patient, will also influence the type of injury sustained. Graph I and Table III serve to emphasise these points and demonstrate that each decade has its popular injury, and certain lesions appear to be the prerogative of the less gentle sex.

GRAPH I

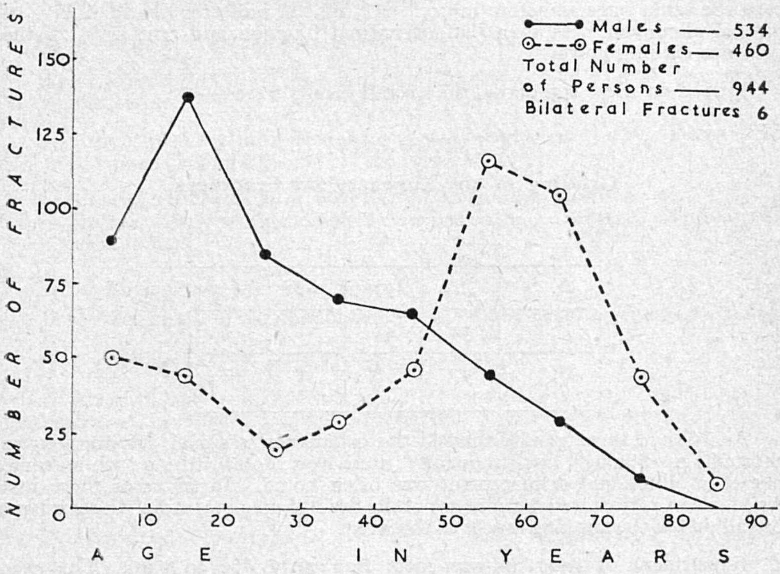

TABLE III.

	0–10		11–20		21–30		31–40		41–50		51–60		61–70		71–80		81–90		
	M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	
Metaphyseal	**74**	**48**	58	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	209
Epiphyseal	10	0	**44**	5	—	1	—	—	—	—	—	—	—	—	—	—	—	—	60
Scaphoid	4	1	22	1	**37**	1	14	1	8	0	3	2	1	0	1	0	—	—	96
Suprastyloid	2	0	13	7	20	15	18	23	24	38	24	**99**	20	**101**	6	40	0	7	457
Carpus	—	—	2	2	10	1	13	1	14	4	8	3	5	2	1	1	0	0	67
Radial styloid	—	—	2	0	13	0	10	2	10	1	5	0	0	1	1	0	0	0	45
Others	0	1	5	1	4	3	12	2	9	2	3	8	4	3	0	3	0	0	60
TOTALS	90	50	146	45	84	21	67	29	65	45	43	112	30	107	9	44	0	7	994

Results of Suprastyloid Fractures :

To estimate the results of treatment of this fracture, a hundred unselected cases have been examined. All were over six months old, while the majority had been sustained four to seven years before assessment.

It appears necessary when reviewing results to state by what criterion they are being appraised. Thus anatomically, a result may be bad, yet function may be good. In an attempt to meet this difficulty, the three letter grading system of the Massachusetts General Hospital has been employed (Wilson, 1933). " The result is evaluated from three standpoints, A (Anatomic), F (Functional), E (Economic), and is expressed in numbers ranging from 0 to 4, the former expressing the minimum and the latter the maximum. Considerable latitude is permitted by the numbers, 1 representing 0–25%, 2 from 25–50%, 3 from 50–75% and 4 75–100%. ' Anatomic ' refers to bony alignment and is determined from X-rays. ' Functional ' takes into consideration the range of joint movement, muscular strength, and the presence or absence of pain ; while ' Economic ' refers to working and earning ability. For example, A3, F4, E4 means that the X-ray shows slight bony deformity, but that functionally the patient is practically normal, and that he is able to do the same work and earn the same wage as before injury. A1, F2, E3 indicates less than 25% of normal alignment, less than half of normal function and only 75% of the previous earning power."

Judged on these standards, the overall results were :—

TABLE IV.

Grading of 100 Suprastyloid Fractures.

	4	3	2	1
A.	27	52	21	—
F.	52	41	7	—
E.	97	2	1	—

Analysis of these results showed the commonest residual deformity to be shortening. Slightly less frequently there was dorsal tilting, while some degree of rotational displacement was often noted. In 29 cases there was visible deformity due to prominence of the head of the ulna, radial displacement or fullness of the anterior aspect of the wrist.

Impairment of function was most frequently due to pain. This was usually aching in character and felt diffusely across the back of the wrist or around the lower end of the ulna. Heavy lifting or twisting movements in particular aggravated this symptom. Damp weather was almost universally incriminated as an exciting cause. It was noteworthy that many patients stated that pains had been present for several years after the injury and then gradually ceased. Radiological evidence of osteoarthritis of the radiocarpal joint was present in 7 cases, and although some degree of incongruity of the radio-ulnar joint surfaces was frequently seen, there were never any radiographic osteoarthritic changes.

A fifth of the cases had some diminution in strength of the wrist, but in only two was this marked. Some residual limitation of movement was present in the vast majority of cases. It was rare to find radial or ulnar deviation affected, a decrease of 10–30° of palmar flexion was frequent, but commonest of all was lack of full rotation.

Three persons only suffered permanent economic loss due to the injury. In two, this was slight and appeared to be an excuse to give up part-time work, but the third was a bricklayer who lost his job because he was unable to turn his wrist to use his trowel.

Complications were rare and none serious. There was no case of rupture of the extensor pollicis longus tendon, nor any disturbance due to nerve compression. Four cases showed thickenings in the palm like early Dupuytren's contracture.

To sum up, the anatomical results were poor. Functionally, in terms of pain, loss of movement and weakness, they were fair only. The fact that these one hundred fractures were responsible for very little permanent economic loss is due largely to the injury being predominantly one of old people, who expect and accept some disability. But function is the golden mean, and the fact that in half those injured it remains impaired merits further investigation—and improved treatment.

WHY SHOULD FUNCTION SO FREQUENTLY REMAIN UNSATISFACTORY?

Critical analysis shows that certain factors do NOT influence the end result.

Age : Equally good results may be obtained with adequate treatment in young, middle aged and aged patients.

Sex : Male and female patients do equally well.

Wrist affected : Right and left hand fractures give exactly comparable end results.

Fracture of the Ulnar Styloid : This was present in 62% of cases and did not affect the quality of the end result.

Fractures entering into the radial articular surface : In 33% of fractures there was radiological evidence of this. It was of no prognostic significance.

Factors influencing the final results :

Three factors are of paramount importance in determining the final results :

(1) The degree of original displacement :

11 fractures were undisplaced, while 89 showed a varying amount of displacement of the distal fragment. Analysis of these two groups shows a marked difference in grading (Tables V and VI).

TABLE V.

11 Undisplaced Fractures.

	4	3	2	1
A.	**10**	1	—	—
F.	**8**	3	—	—
E.	11	—	—	—

TABLE VI.

89 Displaced Fractures.

	4	3	2	1
A.	16	**50**	23	—
F.	**43**	**38**	8	—
E.	86	2	1	—

While some of the most severely displaced fractures were accurately reduced, *in others comminution made accurate reposition difficult to achieve and the* position obtained unstable.

(2) The quality of reduction :

Of the 89 displaced fractures, 13 were perfectly reduced, reduction was satisfactory with a very little deformity after manipulation in 49, while the remaining 27 were either very poorly reduced or no reduction attempted. Each group showed end results of different qualities (Tables VII, VIII, IX).

TABLE VII.
13 Reduction Perfect.

	4	3	2	1
A.	**7**	4	2	—
F.	**8**	4	1	—
E.	13	—	—	—

TABLE VIII.
49 Reduction Satisfactory.

	4	3	2	1
A.	7	**32**	**10**	—
F.	**25**	**21**	3	—
E.	48	**1**	—	—

TABLE IX.
27 Reduction Poor.

	4	3	2	1
A.	2	**14**	**11**	—
F.	10	**13**	4	—
E.	25	**1**	**1**	—

(3) The maintenance of reduction until union is sound :

Redisplacement was extremely common, being present to some extent in 85%. It was severe only in those fractures originally displaced, but was not necessarily proportional to the degree of original displacement. Marked redisplacement beneath the plaster occurred in 30% during the first fortnight after reduction and was not influenced by the position obtained at the initial reduction. Tables X and XI give an indication of the importance of this factor in adversely influencing the results.

Of the 62 fractures in which perfect or satisfactory reduction was obtained, redisplacement occurred in 22.

TABLE X.
40 Undisplaced Fractures.

	4	3	2	1
A.	**14**	**22**	4	—
F.	**29**	10	1	—
E.	40	—	—	—

TABLE XI.
22 Redisplaced Fractures.

	4	3	2	1
A.	—	**14**	**8**	—
F.	4	**15**	3	—
E.	21	**1**	—	—

When the final position was poor, function was invariably impaired. The frequency and importance of redisplacement makes it clear that it is useless to obtain an accurate reduction unless the fracture is efficiently splinted.

Treatment :

The fractures of this series were treated by different surgeons and various methods. Reduction was attempted in practically all the displaced fractures. The limb was immobilised in a plaster cast for 5–7 weeks.

It is desirable and should be possible to achieve better results. Of the three factors mainly influencing the end result, the first—the degree of original deformity—is outside the control of the surgeon ; but the quality of the reduction and retention in a stable position offer a challenge to his skill. No amount of physiotherapy will compensate for an imperfect reduction or for slipshod splintage during the unstable period of the first fortnight.

The forces necessary to reduce a fracture are the opposite to those which have caused it. The position of the distal fragment in most Colles fractures indicates that the deforming forces have been those of compression along the long axis of the limb, dorsi-flexion, radial deviation and supination. Reduction will be effected by the opposite forces—traction along the axis of the limb, palmar flexion, ulnar deviation and pronation. Furthermore, subsequent redisplacement will be less likely if the fracture is then held in the position obtained by the use of these forces. Whilst complete immobility is unnecessary the fragment must be held in such a way that the original displacing forces cannot act. Most difficult to control is compression by muscle spasm and this factor, together with comminution of the bone at the site of impaction on the dorsal surface, makes shortening with some degree of dorsal tilting the most frequent secondary deformity.

The chief advantages of the method of reduction here described is simplicity, for a good position can be achieved without manual dexterity.

Method of Reduction :

Full muscle relaxation is essential—preferably by adequate general anæsthesia.

The patient lies supine on a table with the affected arm held at 90° abduction at the shoulder and 90° elbow flexion. The surgeon grips the thumb with one hand and the index, middle and ring fingers with his other hand. He then exerts steady traction for five minutes by the clock—counter traction being provided by fixation of the arm above the elbow by an assistant, or a wide bandage tied at its other end to a fixture in the wall. At the end of this time, which seems incredibly long, the thumb is brought into line with the radius, thus producing ulnar deviation, the wrist is palmar flexed about 30° and the forearm pronated. The assistant's hand, or one of the hands of the manipulator, steadies the front of the forearm while the palmar flexion is maintained. These movements are performed smoothly and gently, yet firmly, and traction is maintained throughout the whole reduction. The arm is then held in full pronation, ulnar deviation and slight palmar flexion in which position the fracture is locked and will not redisplace.

A plaster slab, which has been measured and prepared before the reduction and consists of six thicknesses of 6 or 8-inch Gypsona bandages, is soaked and placed on the arm and fixed in position with a gauze bandage. The position should not be relaxed until the plaster has set. It extends from just below the elbow (above the flexed elbow in fractures which are very unstable) to the metacarpo-phalangeal joints. It is not only dorsal in position but extends round both ulnar and radial borders to the volar surface of the wrist. While it sets, particular attention is paid to moulding the dorsal and radial surfaces of the carpus and metacarpus. Reduction should be checked radiologically, preferably while the patient is still under the anæsthetic, so that if further manipulation is necessary, it may be carried out immediately.

Perfect reposition is the aim. Posterior rotation of the articular surface of the radius beyond the right angle, dorsal displacement of the distal fragment more than one quarter of its antero-posterior depth or any discernable degree of rotation are not acceptable and demand further reduction.

After Treatment :

The plaster is not completed the same day. The incomplete cast allows a margin of safety for swelling. The patient should be warned of the danger signals of pain, swelling and darkness of the fingers and instructed to report immediately should they become manifest. Finger movements are encouraged and a sling allowed for the first 24 hours, the patient being instructed to report at the Fracture Clinic the following day, when the plaster is checked, and the fingers examined for circulatory changes. The patient reports again the next day and it is usually at this visit, when the swelling is decreasing, that the plaster is completed by one or two four-inch encircling plaster bandages applied over the gauze bandage. The importance of movement of every free joint of the limb, including the shoulder, is stressed, and particular care taken to see that the plaster is strong in the palm of the hand, allows full metacarpo-phalangeal flexion by not extending beyond the proximal palmar crease, and has not a cutting edge in this area or around the borders of the hand and the base of the thumb. Trimming may be necessary at the upper end where a sharp edge digging into the antecubital fossa can be a constant annoyance.

Redislocation is likely to occur between the 7th and 14th days when the swelling has subsided and the cast becomes loose. Visits for examination should be planned to cover this period, the patient being examined on the seventh, tenth and fourteenth days after reduction. If the plaster is found to be loose, it should be changed. This should be done not haphazardly for care is needed to avoid redicplacement. The patient is placed in the position as for the reduction and the hand is held in pronation, palmar flexion and ulnar deviation. The loose cast is removed and a new one applied, the position of the hand being maintained until the plaster has set. The position should then be confirmed by X-ray. When the original plaster does not require changing, the arm should be X-rayed on the fourteenth day. A degree of displacement greater than that acceptable after the initial reduction calls for further manipulation under anæsthesia.

After the first fortnight, satisfactory reduction having been obtained and maintained, progress should be straightforward. Once during the remaining four weeks of immobilisation the cast is inspected to see that fixation is secure. Six weeks after the injury clinical union will be present and the cast is removed. Movements at the wrist joints are limited to a varying degree, but soon increase in range. A short course of physiotherapy is of benefit to elderly and apprehensive patients. X-ray examination at this stage will demonstrate the position but is not required to assess union which will be by callus only.

The time taken to achieve complete recovery varies from patient to patient. While those engaged in clerical duties frequently continue their work which has suffered little interruption, except in the first week of treatment, skilled artisans and others whose employment demands a strong, mobile and trustworthy wrist, may remain incapable of full work for a long period. It is as well to be aware of this, and to base a prognosis on a full consideration of anatomical, functional and economic factors.

It is a pleasure to acknowledge the very great help and encouragement given by Mr. Batchelor in the preparation of this article.

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PHOTOGRAPHY IN THE LIFE OF THE NATION

An exhibition under the auspices of the Royal Photographic Society is open daily from 9.30 a.m. to 5.00 p.m. in the Society's House, 16, Princes Gate, London, S.W.7. It depicts the historical development of photography, its contributions to progress in science and some of its uses in everyday life. The organisers include Miss Sylvia Treadgold of Guy's Medical Illustration Department, Mrs. Joan Beal of the X-Ray Department and Mr. Peter Gill, late of Guy's and now Medical Artist to Great Ormond Street.

Pierre Jeannerat's Comments on some of the Work in the Guy's Exhibition

W. N. MANN'S " Summer Dahlias " was an example of thoughtful design and planning of harmony of brilliant colours ; the design, however, tended to fail because of the excessive strength of the yellow of the background striped curtain. " Still Life " by the same artist was considered to be more successful both in composition and colour harmony though a simpler subject. His " Trinity Square " was criticised, being indefinite in conception ; the onlooker was unaware as to whether the artist was interested in the composition as a whole or the colours presented.

Pamela Carter's " Fair Ground " he praised, being a successful expression of this subject, and in her book design " Salisbury " this technically accomplished artist had again successfully executed a well-planned idea.

He liked Miss Treadgold's " Racoons," being an interesting design executed with obvious technical skill, and Miss Waldron's " Glacier " he also praised for the same reason as an interesting design executed by an accomplished artist, the latter having employed a certain boldness which was not so successful in Dr. Merrivale's " Battersea Park " because of this artist's lack of experience in this technique, though the atmosphere in both these pictures was quite enjoyable.

" Borough High Street " by H. Kinder was a successful portrayal of its subject where technical ability in line and colour had not been used to produce only a photographic impression. J. C. Crossley's " The Loire at Blois " was praised for its atmosphere. The clarity of this was conveyed by the simplicity of treatment of the buildings, the interest being held by the bright roofs and the dashes of colour of their reflections in the water.

He thought that the crimson background to " Self Portrait " by D. McGill had not been altogether successful since it tended to distract from the subject matter of the picture, and this also applied to " Interlude " by D. Bawden, where the design and colour of the floor detracted from the trumpet which was the main subject matter of the picture. " The Front of Guy's " by Jelleyman was commended as being a successful example of the old English water colour school of painting.

Further pictures commended were : Nurse Leach's " In the Queue," R. MacKeith's " Capri," Van Diggelin's " Nightingale Lane, Richmond," Miss Treadgold's drawings of the Siamese cat.

Finally, he commented on the high degree of craftsmanship in the display of silverware by D. J. Andersen, J. W. Mansie and H. Malleson, especially in the latter's design of teapot.

Pierre Jeannerat said that when he is asked " Should I become an artist ? " he invariably gives the reply made by the bishop to the young curate who asked, " Should I become a missionary ? " " It will give great joy and gratification," said the bishop, " not to yourself, and not to your parents, but to the cannibals who will put you in the pot."

Mr. Jeannerat went on to speak of the difficulties in defining an amateur from a professional artist. Many people considered professionals to be those who earned their living by painting but this ruled out such artists as Cezanne and Van Gogh, neither of whom sold more than one picture in a life time. Speaking of the Modern School, Mr. Jeannerat expressed his belief in the greatness of such men as Picasso and Matisse but pointed out that some of the work of these masters was purely experimental and this was not always appreciated by their followers. He ridiculed the young seventeen-year-old student who was out to " express " himself and then painted a grotesque figure expressing nothing, the art student too inexperienced to have anything to say. Mr. Jeannerat stressed the necessity for craftsmanship. Such artists as Picasso were first class craftsmen and started their careers painting in the traditional manner. The art student should first learn to copy what he saw without dodging difficulties and the ability thus acquired would enable him to express his ideas later as they developed. Much so-called modern art was so painted because the artist was incapable of treating the subject any other way, but this deceived no one of experience. Furthermore, he should make up his mind from the start what he was going to express—design, colour, or what you will.

Reviews

Practice of Nursing. By H. M. GRATION and D. L. HOLLAND. Faber & Faber. *Price* 18*s.*

This new edition has been revised and brought as up-to-date as is possible in these changing times. The nurse-patient relationship which has always been a feature of this book cannot be emphasised enough. It is a pity that the notes on " Some Surgical and Medical Cases " is of necessity so brief. The photographs, clear diagrams, together with the improved production, add greatly to its value. P.S.

Medical and Nursing Dictionary and Encyclopædia. By EVELYN PEARCE. Faber & Faber. *Price* 18*s.*

This book is as useful and comprehensive as ever, most helpful for nurses taking examinations. The additional chapter on psychology is of immense value as this subject has now been included in the Nurses' Preliminary Examination Syllabus. P.S.

The Student's Handbook of Surgical Operations. By SIR FREDERICK TREVES, BART. Ninth Edition. Revised by SIR CECIL WAKELEY. Cassell. *Price* 15*s.*

The student could not carry with him all the information which is in this book to the final examination. All standard surgical operations are described and chapters on thoracic and neurosurgical operations are included. There is a brief chapter on skin grafting, but this is inadequate and is below the standard of the rest of the book.

The sections on exposure of arteries, amputations and abdominal surgery are excellent, and the method of intestinal suture is well explained.

This book can be recommended to the student and will enable him to understand what is being done in the operating theatre. R.G.B.

Brompton Hospital Reports, Vol. XVIII, 1949. *Price* 12*s.* 6*d.*

This edition contains thirteen papers from the Hospital staff. Although previously published in other journals, they have been collected here to make excellent reading for those interested in chest diseases. Space does not permit mention of them all, but for me " Surgery of Pulmonary Stenosis " by R. C. Brock, " Honeycomb Lungs " by Neville Oswald and Thomas Parkinson, and " Subphrenic Abscess " by H. R. S. Harley proved most interesting.

G.W.S.

Sport

ATHLETICS

INTER-HOSPITALS' CHAMPIONSHIPS, 1951

These were held at Motspur Park on Saturday, June 9th. Guy's were well represented and had one or more finalists in each event.

Final Results :—

1st, St. Thomas's, 83 pts.; 2nd, London, 76½ pts.; 3rd, Guy's, 59½ pts.

Individual Results :—

E. O. James: 1st, 100 yards, 10.3 sec.; 2nd, 220 yards.

P. Frost: 1st, mile, 4 min. 28.6 sec.

A. Orsmond: 2nd, pole vault, 9 feet 6 in.

J. C. Burt: 1st, Hammer.

1 Mile Medley Relay: 1st, Guy's, 3 min. 45 sec., P. Frost, E. N. McKenzie, E. O. James, I. D. Hudson.

Points were also scored by R. C. Salmon, J. L. Logan, E. Smith, J. V. V. Lewis.

LADIES' TENNIS

1st VI *v.* St. Bartholomew's
Away. Result—Won 5—4
19th May, 1951

2nd VI *v.* St. Bartholomew's 2nd
At Home. Result—Won 6—3
30th May, 1951

1st VI *v.* Royal Free Hospital
At Home. Result—Won 7—2
2nd June, 1951

1st VI *v.* St. Thomas'
At Home. Result—Won 8—1
6th June, 1951

Guy's Sports, 1951

Three years ago the first Guy's Sports since the war were held. It was an indication of one of many steps taken to return to the Guy's of pre-war days to which many older Guy's men refer. The Sports have gradually found their place in the notable events of the Hospital year and many looked forward to the 1951 Sports. Unfortunately the day was cloudy and rain fell throughout the afternoon. In spite of this there was a large crowd.

Poor conditions prevented many outstanding performances but there were several exciting races with close finishes. Those who watched from the grandstand had an extremely good view and a suggestion has been made that next year all races should finish opposite it. Eight housemen ran in the " Housemen's Hundred " after appearing on the field wearing multi-coloured dressing gowns over their tennis wear. This and the famous " Boro' Basket Race " were two of the most enjoyable events of the afternoon. The latter race is one of unique interest since the Guy's Sports is one of the few remaining places in England where the dying art of basket carrying may be seen. The Athletic Club wishes to take this opportunity of publicly thanking the gentlemen from the market for competing and supporting the Sports. The rain made participation in the Novelty Races very unenviable but in spite of this there were many entries.

After the Rugger Club had won the Clubs' Relay for the third year in succession and the Medicals beaten the Dentals by two pulls to nil in the tug-of-war ; the prizes were very kindly presented by Mrs. Atkins. The day concluded with a dance in the pavilion to the music of the Guy's Dance Band.

The Athletic Club wishes to thank, among the many who attended the Sports, Mr. and Mrs. Atkins, Mr. and Mrs. Batchelor, Mr. and Mrs. Eckhoff, Mr. and Mrs. Lawrie.

Throughout the wet afternoon the Sports went smoothly according to the timetable. This efficiency was the result of the wise handling of it by Mr. Batchelor, who has been the Referee at the Sports for three years and has taken a keen interest in athletics at the Hospital for many years, and to the splendid team of officials.

Obituary

DR. F. C. YOUNG

DR. F. C. YOUNG passed away at his home, Meadowside, Twyford, on May 31st, having been in general practice there for 50 years.

After graduating in arts at St. John's College, Cambridge, and in medicine at Guy's Hospital, London, where he was House Physician to the late Dr. Pye-Smith and the late Dr. Newton-Pitt, and House Surgeon to the late Mr. C. Higgins, he travelled extensively in India and the Far East studying and writing about the then little-known disease, Beri-Beri.

On returning to England after two years abroad he became Medical Officer to the South Western Fever Hospital, London. In 1897 he settled in general practice at Twyford, which incorporated that of the late Dr. Bransley Brooks, at Sonning.

Dr. Young held various appointments, including that of anæsthetist to the Royal Berkshire Hospital, Reading, and surgeon to the St. John's Ambulance Brigade. He was an ex-President of the Reading branch of the British Medical Association and a member of the Reading Pathological Society. His chief recreations were golf and hunting and he was a keen follower of the Garth Hounds for 35 years. He was greatly interested in all the local sporting clubs and was church warden at Twyford Parish Church for 26 years. He was much beloved by his patients and friends being of a most kind and generous disposition to whom no one appealed in vain.

Dr. Young was very happy in his married life and he and Mrs. Young celebrated their golden wedding in 1949. He will be greatly missed by a wide circle of friends and much sympathy is extended to his wife and daughter.

J.G.S.

Correspondence

Heraldry

SIR,—Over the past six months the Clubs' Union Council have been discussing in detail the question of the Clubs' Union Heraldry. There is no doubt whatsoever that the old Clubs' Union badge with the shield and the golden knight's helmet is incorrect. Articles by H. St. John Rumsey in the *Gazette* on December 7th, 1946, Vol. 60, page 340, and November 22nd, 1947, Vol. 61, page 328, present a clear and concise account, and should be referred to by anyone not conversant with the matter.

There has been considerable controversy over this question and it is impossible for the Clubs' Union to please everyone. There are those who still desire the old badge to continue and there are those, heraldically interested, who maintain that the badge is incorrect. After much discussion the Clubs' Union Council have finally agreed that the badge with the helmet is no longer the official badge of the Clubs' Union.

Our suppliers, Messrs. Mathew Arnold and Messrs. Ede and Ravenscroft have been notified not to sell any further badges of that type. New badges have been designed for the following use :—

1. The full blue's badge will consist of (*a*) the shield, (*b*) the supporter, the squire's helmet, (*c*) the crest, (*d*) the motto, and the lettering appropriate to the Club and the year awarded.
2. The half blue's badge will consist of the shield and the motto with no crest, but with the appropriate lettering for the award.
3. The Clubs' Union badge will consist of the shield and the motto.

In all the above shields the leopards' heads have been replaced by lions' heads which give a better appearance. Both are heraldically correct.

The suppliers have been given permission to place two exhibition cabinets in the Lower Spit to display these new badges. They will display the three types, the full blue, half blue and Clubs' Union badges, ties and buttons.

Furthermore, the holders of blues' awards are reminded that they will be unable to purchase the appropriate colours unless they produce the letter of authorisation issued to them by the Secretary of the Blues' Committee. Old Blues requiring an authorisation for renewal of colours should communicate with the Secretary of the Blues' Committee.

The Clubs' Union regrets the passing of the old badge as it has been used by many generations of old Guy's men, but in their opinion in a few years' time there will be no controversy if the correct badge is finally accepted.

Yours, etc.,
P. G. LARGE,
Hon. Secretary,
Guy's Hospital Clubs' Union

Guy's Hospital, S.E.1.

Guy's Men in Wessex

SIR,—A considerable number of Guy's men are resident in Wessex, but there is little social contact between them. There is a growing feeling among a number of us that this should be rectified by the formation of a Guy's Society for the West of England.

If any Guy's man, medical or dental, feels he would like to be a member of such a Society will he please send his name and address to me in the first instance. At the same time suggestions for a suitable place to hold the first meeting would be welcome.

Yours, etc.,
A. M. McCALL.

Orchard House,
Crewkerne,
Somerset.

Guy's Reunion in Egypt

SIR,—The Second Annual Reunion Lunch of Guy's Men and Guy's Nurses in Egypt was held on Friday, 4th May, at the Turf Club in Cairo. In spite of the rather oppressive day we were joined by colleagues from Alexandria and the Canal Zone.

An excellent lunch was followed by appropriate remarks from the Senior Guy's man present, Dr. Alcee and his vis-a-vis Col. Watson, who both expressed our pleasure at this meeting, and drew attention to the peculiar flair Guy's people have for " getting together."

The " Guy's spirit " manifested itself in its own way. Old friendships were renewed ; Guy's, and its well-remembered figures of the past took shape again ; attempts were made to visualise the Guy's of the future.

We left with the unspoken feelings of a pride in our common origin. Altogether a most enjoyable occasion, and one which, we hope, will continue.

The following were present :—

Miss Baker
Colonel Watson
Miss Shackshaft
Captain Mitchell
Colonel Vine
Captain Burton
Miss Haile
Miss Foley
Mrs. Taylor (née Ingles)
Mrs. Glover (née Sumpter)
Mrs. Formby (née Halford)
Dr. Lunn
Dr. Alcee
Dr. Arafa
Dr. Hamilton

Yours, etc.,
W. H. HAMILTON.

22, Sharia Kasr-el-Nil,
Cairo.

Guy's Diary

June		ACADEMIC
		Exhibition. Surgical Department. " Obstructive Jaundice."
18th	1.00.	Sir Heneage Ogilvie. Clinical Lecture. " The Treatment of Advanced Cancer."
19th	1.00.	Dr. W. W. Scott, M.D., Brady Urological Institute, Johns Hopkins Hospital. Clinical Lecture. " The Diagnosis and Treatment of Prostatic Cancer."
21st	1.00.	J. Eager Howard, M.D., Associate Professor of Medicine, Johns Hopkins Hospital. Clinical Lecture. " Diabetic Acidosis."
22nd	1.00.	Dr. Hampson. Clinical Lecture.
23rd	10.00.	Surgical Department. Clinico-Pathological Meeting. Clinical Theatre.
25th	12.00.	Mr. K. E. Pringle. Dental Clinical Lecture. " Orthodontic Advances in Europe." Dental Theatre.
	1.00.	Evarts A. Graham, M.D., Department of Surgery, Washington University. Clinical Lecture.
26th	1.00.	J. Eager Howard, M.D., Associate Professor of Medicine, Johns Hopkins Hospital. Clinical Lecture. " Spontaneous Hypoglycæmias."
28th	1.00.	Mr. Wass. Clinical Lecture. " Colostomy and its Management."
29th	1.00.	J. Eager Howard, M.D., Associate Professor of Medicine, Johns Hopkins Hospital. Clinical Lecture. " Tetanus."

N.B.—ALL X-RAY MEETINGS, GORDON MUSEUM, CANCELLED UNTIL FURTHER NOTICE.

June		SPORT
20th		Tennis. 1st VI *v.* St. Bartholomews. (H.O.P.).
23rd	2.30.	Cricket. 1st XI *v.* Metropolitan Police. (H.O.P.).
	2.30.	Cricket. 2nd XI *v.* Barrow Blackman. (Away).
		Tennis. 1st VI *v.* West Herts. (Away).
		Tennis. 2nd VI *v.* Ealing B. (Away).
		Ladies' Tennis VI *v.* Bedford College. (H.O.P.).
24th	2.30.	Cricket XI *v.* R.N.V.R. (H.O.P.).
30th		Tennis. 2nd VI *v.* St. George's Hospital. (Away).
		Ladies' Tennis VI *v.* St. Mary's Hospital. (H.O.P.).
July		
1st	11.30.	Cricket XI *v.* Bognor Regis. (Away).
		Tennis. 1st VI *v.* Eastbourne. (Away).

Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Full-time Assistant to the Visiting Dental Surgeons** to commence duties on 1st October, 1951. This appointment provides facilities for study for a higher qualification.

Salary will be £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **13th July, 1951.**

ADDISON LECTURE

The Fifth Addison Lecture will be delivered in the Physiology Theatre on **Thursday, 5th July, 1951,** at 5 p.m., by Professor F. G. Young, Ph.D., D.Sc., F.R.I.C., F.R.S., on "Thomas Addison and the Background to Cortisone." The Chair will be taken by Sir Henry Dale, O.M., G.B.E., F.R.S., M.D., F.R.C.P. Tickets obtainable on application to the Dean.

APPOINTMENT

Dr. G. Blake Palmer has been appointed Medical Superintendent, Tokanui Hospital, Te Awamutu, New Zealand.

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CHANGE OF ADDRESS

B. D. Johnson, D.A., M.R.C.S., L.R.C.P., 443, London Road, Leicester. Tel.: Leicester 76068.

BIRTHS

HAND-BOWMAN.—On May 22nd, 1951, at the Meteor Nursing Home, Westcliffe-on-Sea, to Margaret (née McArthur), wife of Denis Hand-Bowman, L.D.S., R.C.S.—a son (Michael John).

ROBINSON.—On June 11th, 1951, at the Westminster Hospital, to Mary (née Portman-Lewis), wife of Alan A. Robinson, B.D.S.—a daughter (Sally).

RUGG-EASEY.—On May 29th, 1951, to Margaret (née Taylor), wife of D. L. Rugg-Easey, M.B., B.S., B.D.S.—a daughter.

MARRIAGE

ZORAB—CLAY.—On May 19th, 1951, Phillip Arthur Zorab, M.R.C.S., L.R.C.P., to Jane Clay, S.R.N., at Chepstow, Mons.

DEATHS

COWLES.—On April 23rd, 1951, Hector Charles Cowles, L.D.S., R.C.S., of The Cottage, Brandon, Suffolk.

HALL.—On May 16th, 1951, Sir Robert William Basil Hall, K.C.B., O.B.E., Surgeon-Vice Admiral, of "Appletrees," Haslemere, Surrey.

ILOTT.—On May 20th, 1951, suddenly, James Ernest Ilott, L.D.S., R.C.S., of 64, Albert Road, Colne, Lancs.

NORTON.—On May 31st, 1951, Edgar Lionel Norton, M.B., B.S., of Manson House, Bury St. Edmunds, Suffolk.

OWLES.—On March 20th, 1951, Wilfred Harding Owles, M.D., M.R.C.P., of 14, Whitehall Road, Rhos-on-Sea, Colwyn Bay.

YOUNG.—On May 31st, 1951, Frederic Charles Young, B.A., M.B., B.Ch., of Meadowside, Twyford, Berks.

Eds. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

THE news that permission to commence building the new Guy's had been received was received everywhere with great pleasure. The iron girders supporting Guy's House were alone sufficient indication of the need to put in hand some long term scheme of new building, and although only a small part of the new building is now to be started upon, even this is something to be grateful for—alike to those at Guy's who have handled the negotiations and those in the Ministry of Health who—no doubt casting anxious glances over their shoulders towards the Treasury—sanctioned this magnificent scheme.

It is not the new Guy's, however, which is our present topic, but its surrounding land. We understand that building will commence on the site of the present temporary Car Park at the corner of Maze Pond and St. Thomas' Street. The building will therefore have one aspect towards London Bridge Station with all the latter's dirt, its dust and its noise. On the opposite side it will look out towards many acres of bomb damage, rubble and rubbish which have lain in rotting and dusty heaps since being dumped there during the war. We have often thought what a pity it is that this land has not long since been levelled and seeded with grass. Now that work in one corner of the area is to be started we feel more than ever that if some small part of the available money were to be applied in improving this ground it would do much to enhance the environs of the old Guy's as well as benefit the new.

A hospital built miles in the country may be very satisfactory for some purposes but Guy's was founded and grew up in the Borough and no one would ever advocate that its new buildings should be erected elsewhere. There is no need, however, for a Borough site to be surrounded by squalor or dirt and one hopes that the same patience, care and forethought which has characterised the planning of the new Hospital building may now be directed towards providing where possible both the old Hospital and the new with a suitable environment.

* * *

It has recently been announced that a cash gift to the Hospital from the Guy's Guild of Ex-Patients has been made. The terms of the gift are as follows :—£2,000 for Research in Mitral Stenosis, which has been developed at Guy's as a result of the work by the Surgeon-in-Charge and others on Valvulotomy. £500 for the purchase of an angio-cardiography apparatus, which is a special diagnostic X-ray equipment required in connection with the treatment of 'Blue Babies' and is not supplied by the Ministry of Health.

* * *

The Hospital Garden Party was held in the grounds of the Hospital on Wednesday, June 20th. It was a most enjoyable occasion and an account of it will be found later in this issue.

* * *

We offer our congratulations to Mr. P. J. Frost on winning the University of London Lawn Tennis Singles Championship for 1951.

Primary Atypical Pneumonia

By W. N. MANN, M.D., F.R.C.P.

A Clinical Lecture given at Guy's Hospital.

LADIES AND GENTLEMEN.—In a previous lecture, I discussed *lobar pneumonia* with particular emphasis on the natural history of the disease and its course when seen unmodified by treatment with modern drugs. Before describing *atypical pneumonia*, I want to explain the way in which attention was first drawn to this disease. Until just over twenty years ago, there was no specific treatment for lobar pneumonia, which was a very serious and very mortal disease, so that the death rate was often higher than twenty per cent. of cases, and it was in addition a disease commonly affecting young, healthy adults and therefore a very dramatic illness. The first treatment we had of a specific kind for lobar pneumonia was anti-pneumococcal serum. It was never very popular in this country where it did not seem to modify very much the mortality, although in the United States where epidemics of pneumonia were even more lethal than they were here, it enjoyed a considerable vogue. Then about twenty years ago, the sulphonamides were first introduced and it soon became apparent that whereas the majority of patients with lobar pneumonia responded rapidly to treatment with these new drugs, and they are still the treatment of preference, a number of cases including many of the slighter ones, failed to respond. It gradually became clear, and particularly in the early war years when there were special opportunities for investigating radiologically outbreaks of respiratory infection in Service communities, that there were two distinct diseases : *lobar pneumonia* and a somewhat similar, though generally milder and benign disease, which was called *primary atypical pneumonia*. It was called " primary " because, like lobar pneumonia, it arose suddenly in previously healthy people and did not, like *broncho-pneumonia*, complicate previously existing disease of the respiratory tract. It was called " atypical " because it failed to respond to treatment commonly effective in lobar pneumonia. It was called " pneumonia " because consolidation of the lung could be detected radiologically although the physical signs of such consolidation are usually delayed, often equivocal and sometimes absent.

CASE HISTORY

The following case illustrates very well the sort of problem which atypical pneumonia may provide :—

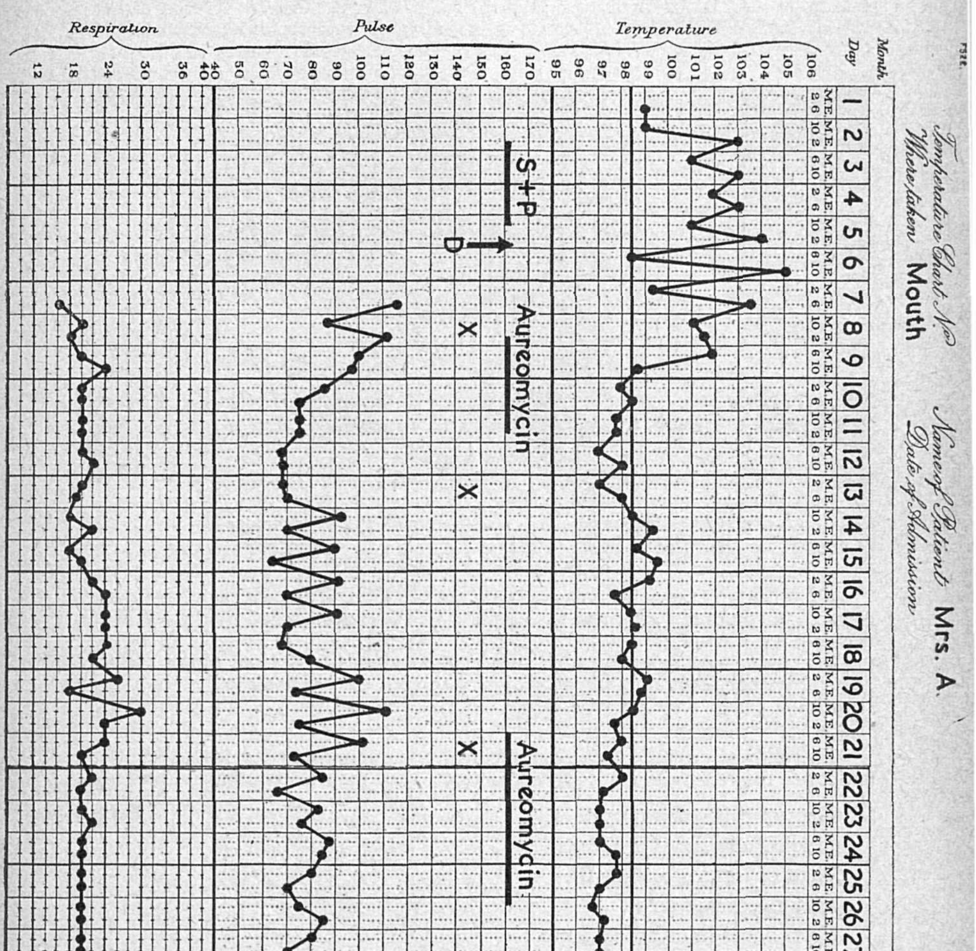
Mrs. A. was a housewife, forty-two years of age ; she had always enjoyed good health and had never been abroad except to Western Europe on holiday. One morning in January she woke with a slight irritating cough—she was staying in London at the time and she was well enough nevertheless to take the children to the pantomime the same afternoon. By the evening she complained of malaise and pains in the limbs. The next morning she felt a little better, but by the afternoon her temperature had risen to 103°F. (See Fig. 1). She was given penicillin and sulphonamides without response although the administration of Dover's powder temporarily relieved the fever. During the first week no abnormal physical signs apart from fever appeared, while in particular the respiratory rate was not conspicuously raised—nor was tachypnœa a feature of the illness at any time. She felt very unwell without being able to say exactly why. She had pains in the back and limbs, but these were transient. Headache was slight. The occasional irritating cough which had been present since the beginning of the illness continued, but there was no sputum. Her doctor examined her very carefully on a number of occasions and found no physical signs ; no spots, nothing abnormal in the chest and no enlargement of the spleen. You will see from the temperature chart that the fever continued to rise in remittent fashion and naturally the possibility of enteric fever was kept in mind, and when I saw her towards the end of the first week of the illness, I thought this very likely indeed, so that when she was admitted to Guy's on the seventh day, she was put on " barrier precautions."

Fig. 1.

Temperature chart of Mrs. A.

The times at which sulphonamides and penicillin, Dover's powder and aureomycin were given, indicated on the chart.

"X" indicates the days on which X-ray examinations of the chest were made.



I want you to see that the differential diagnosis from other infective fevers is a very important one and may be very difficult. A white cell count was done on admission and this showed that the polymorphonuclear cells amounted to 68 per cent. of 7,000 cells, which made enteric fever unlikely. However, the true diagnosis became immediately apparent when an X-ray of the chest was seen (Fig. 2). You will notice the wedge-shaped opacity in the mid-zone of the left lung and a less well-defined increase of density in the right lower zone. In spite of these striking radiological appearances, there were as yet no abnormal signs on physical examination of the chest. That there should be so much on radiological examination and so little on physical examination is typical of this disease.

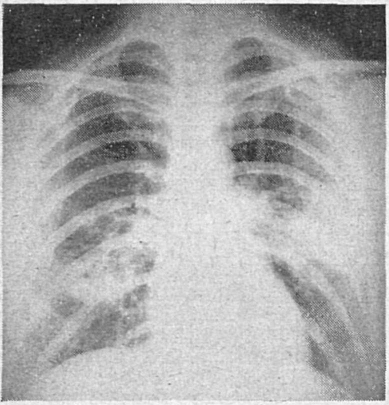


Fig. 2. 7th day of the disease.

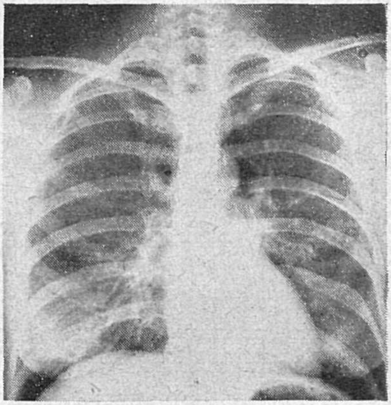


Fig. 3. 13th day of the disease.

What is atypical pneumonia and what causes it? When we say, "primary atypical pneumonia," we mean an illness which is characterised by the features this patient showed. Fever difficult to diagnose, a little cough, no other physical signs—no splenomegaly, no enlarged glands, a normal blood count. Sometimes the fever may be very high, although also in some cases the constitutional upset may be very slight. Headache is usualy slight or absent.

The clinical picture of primary atypical pneumonia may be produced by a variety of organisms and not all are viruses; they may be listed as follows:—

Virus of Psittacosis (Ornithosis).

Rickettsia Burneti (Q-fever).

Virus of Influenza (A & B).

An unidentified virus.

Coccidiodes immitis (a fungus).

Psittacosis: The virus of psittacosis was the first organism to be identified which could give rise to this clinical picture. As the name implies, infection may be derived from parrots or other psittacine birds. Because infection with this virus may be very severe and sometimes fatal, an embargo on the importation of such birds into the United Kingdom was introduced before the war. *Ornithosis* is perhaps a better term because illness indistinguishable from psittacosis and due to a closely related virus, may be passed on by birds of other species including sea-birds, pigeons, finches and domestic fowl. There is even some evidence that the virus of this group may be passed from man to man without an intermediate bird host.

Q-Fever : This is an exotic name and Q-fever used to be thought of as something exotic and rare, but it occurs not uncommonly. It is so called because it was first discovered in Queensland. The infecting organism is a rickettsia—*R. Burneti*—and this closely related to those causing diseases of the typhus group which have their alternative host in rats, lice and mice. It is still not clear how the infection in Q-fever is carried ; it was thought to be derived from the excreta of mice or ticks. Although the disease was first described in Queensland, it was subsequently found in California, the Mediterranean littoral and finally in this country at the Royal Cancer Hospital where laboratory workers became infected. Since then it has been found in North Wales and elsewhere. Results of serological tests at the Ministry of Health Virus Laboratory show that Q-fever is probably fairly widespread in the United Kingdom. Clinically it is indistinguishable from the case I have just described of atypical pneumonia.

Influenza Virus : Both *Influenza-A* and *Influenza-B* virus give rise to pneumonia and it seems, certainly recently, that Influenza-B is a not uncommon cause of atypical pneumonia.

Unidentified Virus : When the other organisms responsible for atypical pneumonia have been excluded by complement fixation tests, a large group remains. It seems likely that these are due to a virus which has so far not been isolated but the presence of which can be suspected by certain serological tests. The serum from patients so infected produces two rather curious effects. Firstly, it is generally found that cold agglutinins are present. Secondly, there is a strain of streptococcus (*Streptococcus M.G.*) isolated in the United States from a fatal case of atypical pneumonia which serum from patients infected with this virus will agglutinate.

Coccidiodes Immitis : The same clinical features have been produced by infection with this fungus, although so far no cases have been recognised in the United Kingdom.

I think it would be interesting to see how far each of these infecting organisms is responsible for cases clinically diagnosed as atypical pneumonia in Great Britain. Dr. Marmion analysed the serological reactions of 690 sera sent to the Central Public Health Laboratory at Colindale and I have tabulated them in two ways ; firstly, to show the " serological pattern " in relation to the clinical diagnosis (Table 1), and secondly, the " clinical pattern " in relation to the serological diagnosis (Table 2).

TABLE 1.

CLINICAL DIAGNOSIS	SEROLOGICAL DIAGNOSIS	NUMBER OF CASES	
Influenza	Psittacosis	A few	29+
	Q-Fever	2	
	Influenza-B	27	
Atypical pneumonia	Psittacosis	A few	136+
	Q-Fever	18	
	Influenza-B	51	
	" Unidentified virus "*	67	
Lobar pneumonia	Influenza-B	15	
Broncho-pneumonia	" Unidentified virus "*	11	
P.U.O.	Q-Fever	3	11
	Influenza-B	8	

* " Unidentified virus " : Cases in which the serum contained cold agglutinins and/or showed agglutination with *Streptococcus M.G.*

TABLE 2.

Serological Diagnosis	Clinical Diagnosis	Number of Cases	
Psittacosis	In all clinical categories	A few	
Q-Fever (*R. Burneti*)	Influenza	2	23
	Atypical pneumonia	18	
	P.U.O.	3	
Influenza-B	Influenza	27	101
	Atypical pneumonia	51	
	Lobar pneumonia	15	
	P.U.O.	8	
"Unidentified virus"*	Atypical pneumonia	67	78
	Broncho-pneumonia	11	

* "Unidentified virus": Cases in which the serum contained cold agglutinins and/or showed agglutination with *Streptococcus M.G.*

You will see from these tables that atypical pneumonia is produced most often by the "Unidentified virus" with influenza virus a close second. Less frequently, the rickettsia of Q-fever is responsible, and the virus of psittacosis most rarely of all.

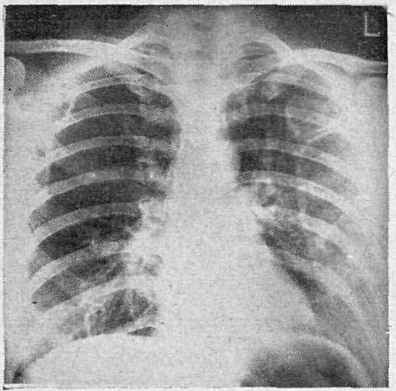


Fig. 4. 21st day of the disease.

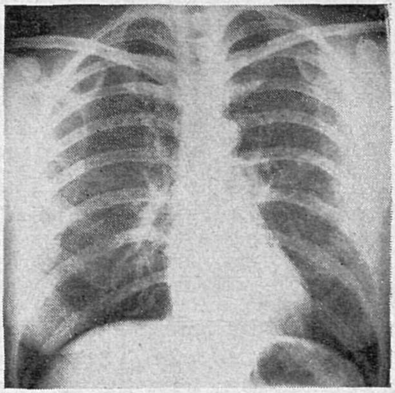


Fig. 5. 28th day of the disease.

[*X-ray photographs by Dr. T. H. Hills.*

In the case of the patient we are considering, the history, the absence of physical signs and the X-ray appearance made the diagnosis clear. Although sulphonamides and penicillin have some therapeutic effect in psittacosis, generally this group of infections is untouched by either of these drugs as is evident in this case for she was given adequate doses of them in the first week without effect. The value, however, of aureomycin was dramatic as may be seen from the temperature chart. After the crisis a second X-ray was taken on the 13th day of the disease, and this showed clearing of the area of consolidation in the left lung (Fig. 3), but a relapse occurred and another X-ray taken on the 21st day of the disease (Fig. 4) shows a new area of consolidation at the base of the right lung. About this time, auscultation of both lungs revealed moist sounds widely spread, her temperature rose and she felt less well. However, the relapse—which is uncommon—quickly responded to aureomycin again and at the end of her illness the lungs were clinically and radiologically normal (Fig. 5).

It is most important to recognise this group of illnesses. They may, in very mild forms, give rise to very little symptomatically. During epidemics of so-called "influenza," as many as 10 per cent. of those struck down with fevers, with or without respiratory symptoms and signs, may show pneumonic patches on X-ray examinations of their lungs. During the epidemic earlier this year, there must have been many cases like this, and when such epidemics are about, it may be useful to know what the infecting organism is. Serum was sent to Colindale soon after admission and again a week later. Dr. Marmion reported that she gave negative complement fixation tests to Influenza-A and -B, to Q-Fever and to Psittacosis. No cold agglutinins were detected, but whereas the first sample taken in the second week of the disease gave agglutination with *Streptococcus M.G.* to a dilution of 1 in 20, the titre had risen to 1 in 80 by the end of the third week. The results were inconclusive ; most probably this was a case of infection with the "Unidentified virus," although one would have liked to demonstrate the presence of cold agglutinins in confirmation.

Primary atypical pneumonia is a clinical identity even if there is little obvious relationship between some of the organisms which cause it. Any tissue of the body can only react, whether it be to infection or to a trauma, in a limited number of ways : clinical identity does not signify ætiological identity.

Conversely there are other diseases of the lungs produced by viruses—and even perhaps by viruses identified with those responsible for some cases of atypical pneumonia—which are altogether different in their clinical appearances. There is, for example, an acute and serious bronchiolitis of infants for which a virus is primarily responsible. Acute influenzal pneumonia, which occurs from time to time in pandemic form, but otherwise exists only in rare sporadic examples, is characterised by an acute hæmorrhagic œdema of the lungs and a fulminating course—something quite different from the illness we are considering here. Nevertheless, it seems that this fulminating form of influenza may be due to the same virus as one which commonly causes atypical pneumonia. Whether this be due to a mutation in the virus itself, or some altered power of resistance in the host, is still not clear. There remain, indeed, many problems concerning the respiratory diseases of man—diseases which account for a large proportion of the illness we are called upon to treat.

I am indebted to Dr. F. A. Dick for the history and for the earlier clinical observations on the patient we have discussed this afternoon.

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The Guy's Hospital Shoe Fitting Service

THE ability to combine a conservative tradition towards those things that have been found to be good, with a progressive outlook towards all new ideas, has always been a characteristic of Guy's. That this has been possible has been due in large measure to the attitude of the Governors of the Hospital, who have always adopted the unbureaucratic policy of approving of any reasonable scheme put forward by the Medical Staff. As a result the Hospital has always been in the forefront with new advances and ideas.

In the sphere of the Orthopædic Department, we were the first teaching hospital to have its own orthopædic workshop, to have an almoner's department run on modern lines, to appoint an honorary consulting chiropodist and later to have a chiropody department. Now we are about to start another new venture, namely, a shoe fitting service.

Treatment designed to relieve foot troubles which have been caused by wearing unsuitable shoes is futile unless the patient first obtains better footwear properly fitted. We have found that the majority of patients are incapable of choosing correct footwear for themselves—even if they can find it. It was felt that if they could obtain good shoes on the spot, expertly fitted, not only would a great deal of time be saved, but remedial measures could be commenced at once with far better prospects of success.

Moreover, we are constantly being asked to give advice on matters relating to footwear for children, and for adults in certain occupations. Such advice can only be theoretical, for we have not the practical data on which it should be based. A shoe fitting service such as we envisage will provide this data if accurate records are kept and the shoes are brought back for repair, which will give the opportunity for a " follow-up."

It is now over five years since a scheme on these lines was worked out and received the approval of the Governors of the Hospital. Unfortunately it had to be postponed owing to the shortage of shoes at that time. Eighteen months ago it was felt that the time had come when a start could be made. The advent of the National Health Service, however, meant that the provisional arrangements which had been approved by the Governors, now had to receive the sanction of the Ministry of Health. That approval has now been obtained and the service is in operation.

The arrangements are as follows :—

The service is responsible for the supply of shoes of certain makes which have been approved by the Orthopædic Department for men, women and children. They will be available for patients, medical staff, students and hospital employees, at the normal retail price. Patients must receive a chit from the Orthopædic Department or from a member of the staff of the Hospital ; students and Hospital employees must obtain theirs from the hospital health service. All will be requested to bring back their shoes to the service for repairs. A complete record of the feet and the shoes will be made in each case, the wearers' own comments also being recorded. In this way it is hoped that not only will those supplied be assured of getting good shoes expertly fitted, but valuable data will be collected on all the many problems relating to feet and footwear. Owing to the fact that the supply of good shoes is still far from easy, and that a large capital sum is required to build up a stock of shoes, it is necessary to start in a small way and to expand the service gradually. While we are anxious that as many people as possible in the Hospital should avail themselves of this service, we ask their indulgence if they cannot be supplied from stock. In such cases their fittings will be taken, the style chosen from samples and the shoes supplied within a day or two.

Finally, it must be stressed that the service is *not* available to members of the public unless they are patients of the Hospital undergoing treatment for some orthopædic or other disability. People must not be referred to the Hospital " for the supply of footwear " other than special surgical shoes.

The Garden Party, 1951

THE Park on Wednesday, 20th June, presented a colourful and musical scene for the second of the garden parties to be held since the war. When deciding to mark the Festival of Britain in such a pleasant and appropriate manner the Board of Governors agreed that the costs should be met out of that part of the Guy's Endowment Fund specifically set aside for social and entertainment purposes.

Counting the patients in the wards and each of their visitors, about 2,500 friends of the Hospital were present in all. The gathering, moreover, was fully representative. It included Governors of the Hospital, the Ladies' Association, the Medical and Dental Staffs and Students, the Nursing, Physiotherapy and Radiography Staffs and Students, as well as members of the Administrative and Clerical Departments and the Technical, Domestic and Artisan Sections. Also accepting invitations were His Grace the Bishop of Southwark, and Their Worships the Mayors of Bermondsey and Southwark, together with officials of the Ministry of Health.

By Courtesy of Fox Photos Ltd.

I. A general view of the Park with Sir William Kelsey-Fry and Mr. H. H. Kenshole on the right.

Entrusted primarily with the organisation were Prof. T. B. Johnston and Sir John Conybeare. Needless to say, countless others were involved. Admission was " by ticket only " and, on arrival, guests found themselves under the unobtrusive care and guidance of the stewards specially appointed.

The musical programme was provided by the Band of the Coldstream Guards, under their Deputy Director, Band-Sergeant-Major E. R. Evans, B.E.M. Beginning at three o'clock they contributed items of light music throughout the afternoon. In their scarlet tunics they made the bandstand a focus of interest and meeting.

By Courtesy of Fox Photos Ltd.

II. Mainly the ladies, with Matron, Mrs. McNair, Mrs. Cook and Mrs. John Blaikley in the centre

Not only were the wards and various departments of the Hospital open to view but special exhibits were staged in the Physics and Biology Departments of the Medical School as well. The Art Show (previously noted in the *Gazette*) attracted quite a number of people, but an even greater crowd was to be found drawn to the various items in the Gordon Museum.

By Courtesy of Fox Photos Ltd.

III. Probably an anecdote—enjoyed by Dr. and Mrs. W. W. Scott of Johns Hopkins, Dr. Grasby of Pembury and Mr. and Mrs. Kilpatrick.

What was particularly agreeable about the whole affair was that, far from providing an opportunity for a few entities to pirouette before a crowd of spectators, it was an admirable occasion for friends to meet together and chat informally, for folks to enjoy the pleasantries of a warm summer afternoon and for many to renew old loyalties. The ladies, if not the men, saw fit to enliven the scene with beauty, brilliance and colour. The accent may well have been upon hats rather than upon dresses, but the millinery display was certainly exciting and, in one or two cases, verging upon the daring as well. Picot straw, trimmed with impudent veiling, was the dominant theme, though occasional " cart-wheels," worn at an almost abandoned angle on the back of the head, provided a striking contrast. The dresses, though gay and chiefly of a floral design, were on severe more than flowing lines. The whole motif was one of feminine and light-hearted gaiety, set against the sombre and severe background of Guy's and the Boro'.

By Courtesy of Fox Photos Ltd.

IV. Hospital and Boro'—The Superintendent with Mayoral guests.

Among those present, Lord Cunliffe was to be seen, as a host among hosts, passing thoughtfully from group to group and looking more apprisingly than ever over a territory, with the destinies of which he has been so much concerned.

Mr. and Mrs. Davies-Colley were also noticed. They were constantly in the midst of changing clusters of earnest conversation. Mr. T. B. Layton, too, looked more vigorous than ever after his recent maritime experiences and, at the party, passed a discerning eye over the scene and cryptic remarks to his many acquaintances.

As a visitor from abroad, Dr. Scott, of the Johns Hopkins was to be seen with his charming wife, delighting in the experience and much of the time in the company of Mr. and Mrs. Kilpatrick.

Guy's in the country was represented by Dr. and Mrs. Grasby from Pembury. Obviously they had many friends to see and much about which they wanted to talk.

A conspicuous figure, too, was the Superintendent. If the cares of office in fact hung heavily about him, or if the success of the event was, ultimately, so much his concern, he at least betrayed no such feelings to his guests. With Mrs. Doherty he played his part with distinction and engaging ease.

Tea provided an agreeable interlude. The organisation behind the catering must have been as expert as it was complicated. Altogether some 2,000 odd teas were served, entirely from the existing resources of the Hospital's kitchens. All credit, then, to those responsible for this achievement. Not only was the presentation most elegant but the very dishes represented the supreme excellence of the patissier's art. Besides a special tea for every patient and visitor in the wards, delightful spreads were available in a marquee in the Park, in the Nurses' Home and in the Physiotherapy and Out-Patient Departments as well.

By Courtesy of Fox Photos Ltd.

V. Absorbed in conversation—Dr. Ryffel, Mr. and Mrs. Davies-Colley, Sir Heneage Ogilvie and Mr. Gayer Morgan, among others.

There is little doubt that the Garden Party was a great success and both credit and thanks are due to those who planned and staged it. In this present grim world, when newspaper headlines are exclusively concerned with crises and alarms, there is all the more reason to grasp at those otherwise brief opportunities that allow some respite from the rigours of daily toil. For too long we have denied ourselves an atmosphere of cheerfulness and light conversation. In so doing, we have surrendered both elegance and grace.

Possibly one feature was lacking from this recent event; that was a *raison d'être*. Before the war, a garden party could have as its purpose the raising of funds; such an object no longer exists. In 1949 the unveiling of the Nuffield Statue was the feature of the afternoon's fête; this year, the Festival of Britain seemed all too vague. Another time, perhaps, some academic event can be arranged, for such is the delight of these alfresco gatherings that they deserve at least to set an annual precedent.

" Bacterial Variation and Chemotherapy "

A paper read to the Guy's Science Club on May 9th, 1951.

By PROFESSOR R. KNOX

MANY of you, I am sure, will remember the often-quoted words from Virgil's Aeneid—" varium et mutabile semper Femina."

This remark, in its immediate context, was singularly unjustified, but it served its purpose, induced the worthy Aeneas to desert the faithful Dido, sent him off again on his travels, and thereby led to the foundation of ancient Rome. The remark, however, can be applied with special force to the group of micro-organisms known to-day as bacteria, and it is this subject of bacterial variation and its importance in the field of chemotherapy that I should like to discuss to-day.

Bacteria are indeed extraordinary creatures. Even the names of some of them seem to express the feelings of surprise with which bacteriologists have watched their varied behaviour throughout the years—*Proteus, Proteus mirabilis, Bact. coli mutabile, Chromobacterium prodigiosum*, etc.

For some years I have been interested in the field of bacterial metabolism. Now to study this adequately one should have a sound knowledge of physics and chemistry, of genetics, of mathematics and statistics. In every one of those fields my ignorance is profound ; yet in spite of all that I do not feel that it is presumptuous for a mere bacteriologist to affirm his interest in bacterial metabolism. Perhaps the bacteriologist stands in relation to bacteria very much as the general physician to his patient. Just as the physician has, as it were, at times to safeguard the integrity of his patient against the encroachments of an ever-increasing number of specialists, so the bacteriologist must try to keep some sense of proportion and safeguard the integrity of the bacterial cell against the onslaughts of those who would explain its activities in terms of bags of enzymes, inter-molecular forces, statistical probability or genes and plasmagenes. It is, of course, perfectly obvious that knowledge of the laws regulating bacterial behaviour can only come from a synthesis of the contributions made by many different sciences and methods ; but the point I am trying to make is that it is a synthesis—and we must not lose sight of the bacterial cell, the fundamental unit of microbiology.

Bacterial variation has been a fascinating theme ever since bacteria were discovered, as an academic study in itself of absorbing interest. Recently, it has become obvious that the study of bacterial variation has immense practical importance—and it is not too much to say that a proper use of chemotherapeutic drugs is impossible in infectious disease unless the practising physician or surgeon has some understanding of bacterial variation—its nature, its scope and its possible consequences. The development of resistance to sulphonamides in gonococci, to penicillin in staphylococci, to streptomycin in tubercle bacilli and so on, all present problems which are just as serious practically as they are interesting theoretically.

First, a few basic facts about bacteria. An organism such as *Bact. coli* is of the order of 1 μ in diameter and 3–4 μ in length; growing at 37°C. in an optimal liquid medium it divides by binary fission about once every 20 mins. The ordinary conditions of incubation give grossly inadequate oxygenation and an organism like *Bact. coli*, which readily utilises oxygen, can reach in say 6–10 hours, depending on the inoculum, a population of the order of 5×10^9 cells per ml.—in an ordinary static broth culture the number is more like 5×10^8 per ml. even on overnight incubation. In the early stages of a bacterial culture, the majority of these cells are alive ; later on, although the population is still slowly increasing, the percentage of viable cells rather rapidly decreases.

The bacteria, of course, are richly endowed with enzymes, and many of these can be studied by using so-called " resting " cells—that is, growing organisms in a nutrient medium for a convenient length of time and then harvesting the cells, washing them free of nutrient medium and measuring their activity against different substrates, e.g., their fermentation of carbohydrates, their reduction of hydrogen acceptors such as nitrate, tetrathionate, molecular oxygen, etc., their hydrolysis of urea, and many other activities under conditions in which bacterial growth can be excluded. A dense suspension of this sort may contain approximately 10^9 cells per mgm. dry weight.

Bacteria often breed true—the same characteristics are transmitted in generation after generation with remarkably little variation. Whether or not the chromosome apparatus is of the same nature as in higher creatures, it is quire clear that there is, on the whole, a fairly rigid genetic control.

I think the following points are especially worth noting :—

1. Their remarkable enzymic activity is of great interest to the chemist.
2. Their small size and importance of the cell surface to the physical chemist.
3. Their large numbers to the statistician, and
4. Their rapid turnover and short generation time to the geneticist. (For example, 20 minutes to a bacterium are as 30–50 years to a human being.)

Bacterial variation. I shall use the term in the widest sense to express any changes occurring in a bacterial population. These may be either :—

1. A temporary response to change in environment, or
2. A permanent genetic change independent of environment.

Consider *Shig. sonnei*, the organism causing Sonne dysentery. Colonies grown on nutrient agar may vary from a round glistening type to a rough type with irregular edge. This is a reversible change dependent entirely on the moistness of the agar surface. But there is also a smooth-rough variation which is not easily reversible and which is independent of environment and associated with a fundamental antigenic change in the organism. Probably both the rough colony and the loss of the specific antigen result from some change occurring at the cell surface. This is a genetic change, a mutation, irreversible, except by back mutation.

The term bacterial variation is sometimes restricted to the second type of change, but since in many instances we are not sure of the true nature of a change we are observing, it is perhaps wiser to use the term in a general sense to cover all the variations in form, size, biochemical activity, antigenic structure and virulence which organisms can undergo.

Let us turn for a moment to the field of chemotherapy. Soon after the clinical use of each new drug or antibiotic has started, the phenomenon of resistance has been observed. Sometimes there is isolated from a patient an organism fully sensitive to the drug but later cultures from the same patient show a progressive increase in resistance ; sometimes resistant organisms are isolated at the start from patients who have never received the drug previously. Barber was one of the first to draw attention to the serious effect of this on treatment. In successive years the percentage of staphylococci resistant to penicillin among patients in a hospital in London was found to be :—

14 in 1946

38 in 1947

59 in 1948

There are different schools of thought as to the cause of this and similar phenomena.

1. There might be an homogeneous population all becoming adapted or trained.
2. An originally homogeneous population throwing off mutants which outgrow the others by selection.
3. An originally mixed population in which the resistant outgrows the sensitive strain.
4. Cross infection—that is, replacement of a sensitive strain by a resistant one. (In Barber's cases it was shown by serological typing of the staphylococci that this was the explanation.)

There is little doubt that many factors may contribute to give rise to resistant variants. But I think that to understand these factors we must return again to the more general theme of bacterial variation.

In studying bacterial metabolism we may recognise two extreme types of process :—

1. Enzymic adaptation.
2. Mutation.

1. In enzymic adaptation we may picture the cells of a bacterial culture as becoming modified as a result of contact with a particular substrate. Bacterial enzymes have been roughly classified as either constitutive or adaptive. A constitutive enzyme is one which the bacterial cells possess as part, as it were, of their genetic make-up and which is present when the organisms have been grown on a wide variety of different media. An adaptive enzyme is one which is not normally present but which can be produced by the bacterial cells when grown in the presence of the specific substrate. This distinction between the two kinds of enzyme is in fact rather artificial but is useful if not taken too literally. The process of enzymic adaptation can be followed by incubating washed suspensions of bacteria in the presence of the specific substrate and observing the increased enzymic activity stimulated by the substrate. It has been shown by Stephenson and others that this process can occur *without demonstrable cell growth*, and the great advantage of this is that it completely rules out natural selection as a possible mechanism. Pollock and I studied the adaptive formation of tetrathionase in this way, and I have recently been doing some experiments suggesting that bacterial urease can be formed by a somewhat similar process of enzymic adaptation.

In the course of these experiments it was found that the process of enzymic formation was much more sensitive to temperature than the fully-formed enzyme. Now organisms of the genus *Salmonella* can utilise sodium tetrathionate as a hydrogen acceptor, reducing it to sodium thiosulphate, and in a medium containing an adequate source of energy but deficient in oxygen it can be shown that the addition of tetrathionate enables the organism to grow well because it can use the tetrathionate as, in effect, an alternative hydrogen acceptor to oxygen. But if the organism is grown at a higher temperature than normal, say 41°, instead of 37°, tetrathionate no longer has this growth-promoting effect because the organism cannot adequately produce tetrathionase at that temperature.

Recently Pollock has shown that penicillinase, the bacterial enzyme which inactivates penicillin, can be produced adaptively by some organisms in washed suspension. Following up this observation, my colleague Dr. Collard and I have shown that the apparent sensitivity of such organisms to penicillin can be greatly increased by raising the temperature of growth. For example, a strain of *B. cereus* which grows equally well at 37° and 42° in the absence of penicillin will tolerate far higher concentrations of penicillin at 37° when it can adaptively form penicillinase than at 42° when it cannot.

2. Mutation. This process must be sharply distinguished from enzymic adaptation.

The term has been used with increasing frequency in recent years. Is it justified ? It seems clear that organisms must have a genetic apparatus which reproduces itself with remarkable fidelity through many generations and it seems justifiable to use the term mutation for a discontinuous change occurring apparently independently of environment and persisting in subculture.

Sometimes it is difficult to say whether a given change is due to mutation or not. If the mutation is rare, say occurring once in every 10^8 divisions or so, and if anything resembling back mutation is never observed, then it is easy enough. But bacteria have a very rapid turnover, and there are some types of bacterial variation in which the movement seems to occur with almost equal rapidity in either direction. E.g., in the salmonella group of organisms the flagellar antigens show a diphasic variation from type to group or group to type ; variation may occur in either direction very rapidly, so neither variant can be regarded as really stable. Yet the variation is unpredictable and seems to occur independently of environment, though the addition of the appropriate group or type serum can exert a powerful selective effect. For these reasons the group—type variation is normally regarded as an example of a mutation with a very high mutation rate in either direction.

This example is in fact almost undermining one of our criteria of a mutation—its permanence. I mention it to show how difficult it can be to decide in certain cases whether a change is really environmental or genetic.

That genetic factors are important was clearly shown by the work of Lewis on *Bact. coli mutabile*; this is an organism which, though it ferments glucose rapidly, ferments lactose only after some delay. On a solid medium containing lactose and an indicator such as Andrade's, red papillæ appear after a variable time and subcultures from these papillæ breed true—they ferment lactose rapidly. They can in fact be regarded as lactose fermenting mutants of a non-lactose fermenting organism.

Now Lewis showed by special methods that these organisms were present in very small numbers in media not containing any lactose. In medium containing lactose as the sole source of carbon, they rapidly outgrew the " normal " organisms which could not utilise lactose.

In some experiments we have done we have found the same kind of thing. Using *Shigella sonnei* we have subcultured pure lactose or sucrose fermenting mutants from papillæ obtained in the same way.

Here, then, are these two mechanisms of " adaptation " on the one hand and " mutation " on the other. There are those, such as Hinshelwood, who would seek to explain most of the changes in bacterial activities as the result of chemical adaptations. Others, such as Luria and Delbruck, have concentrated on the genetic aspects, and have claimed that permanent modifications of bacterial behaviour are due to mutation and the selection of mutants. It is well recognised that tailless mice cannot be bred by the simple process of cutting off tails, and the school of bacteriologists who believe that permanent bacterial variation can be the result of adaptive changes rather than of selection is branded by the orthodox geneticists as the " last stronghold of ' Lamarckism ' or even ' Lysenkoism '."

I think, however, there are two points of importance here :—

1. The nuclear apparatus of bacteria and the method of reproduction are clearly different from those of higher animals. For example, cutting the tail off a mouse has no effect on the germ cells and therefore could not be expected to produce more than somatic effects on the mutilated individual; on the other hand drastic but sub-lethal treatment of bacteria by heat or antiseptics might conceivably so affect the bacterial protoplasm as to produce a permanent distortion which would easily express itself in a disordered metabolism of the descendants.

2. In many cases of bacterial variation there is no doubt that both processes may be at work. For example, in the variation of *Shig. sonnei* to lactose or sucrose fermentation we could distinguish :—

i. Genetic control of the *capacity to adapt*, and

ii. Environmental stimulus to adaptation.

Perhaps I may give a rather crude analogy. The " normal " *Shig. sonnei* is like a balloon which cannot be filled with air because the inlet is blocked up. The sucrose mutant, however, is like a similar balloon with a patent air way into it. It has the *capacity* for being filled with air (and this is distinguished " genetically " from the blocked up balloon), but this capacity is only utilised when it is actually filled with air (" fully adapted "). Let the air out and the balloon collapses again.

I have dealt at some length with these somewhat academic aspects of bacterial variation because I believe that a firm grasp of the principles that may be involved is essential if we are to understand the responses of bacteria to chemotherapeutic agents. Clearly we must picture a bacterial population, even a " pure " culture, as consisting of vast numbers of individuals with many characteristics, each varying about a mean. For example, nearly all the members of a culture of *M. tuberculosis* may be sensitive to streptomycin but in varying degree, and a few members of the population may be highly resistant; but in that same bacterial population resistance to other antibiotics, nutritional requirements, susceptibility to disinfectants or to heat and many other properties will each be distributed in a different and characteristic way. It would seem reasonable to imagine that quite considerable fluctuations about the mean might occur in such a population and that in this way it might be easy to " train " a culture to tolerate concentrations of a drug which would have been lethal to practically all the cells in the original culture. Such a " trained " culture might be expected to revert to normal when inoculated into media not containing the drug, whereas an increase in resistance persisting in subculture in the absence of the drug might well be supposed to occur only as the result of a mutation or the selection of already existing mutants. It is quite clear that bacteria, like larger organisms, have some measure of individuality and that the behaviour of a bacterial population in any particular set of circumstances is conditioned by the average behaviour of the majority of the cells which may yet fluctuate widely about the mean.

This subject of bacterial variation is full of problems fascinating alike to the microbiologist and to the clinician and to the epidemiologist. Why is it that the fluctuations around the " normal " seem to be much wider with some antibiotics than with others, and with some organisms than with others? Why does the gonococcus readily develop resistance to sulphonamides whereas the meningococcus does not? Why does the staphylococcus develop resistance to penicillin whereas *Streptococcus pyogenes* rarely does? Why is resistance developed much more readily to streptomycin than to other antibiotics? What determines the frequency with which true mutations, if indeed these are different from such fluctuations, can occur, or with which cells develop the capacity to adapt themselves to new substrates? What do we mean by a pure culture? The answers to these and many other similar questions will not be forthcoming until we have accumulated more data not only in the laboratory but also in the field of clinical medicine. In this field for example we want to know much more about the different ways in which bacteria can react to chemotherapeutic drugs. Already, as Garrod has pointed out, four types of reaction are known :—

1. Suppression, 2. Habituation, 3. Stimulation, and 4. Dependence. This last type of reaction must be mentioned as it illustrates the incredible ingenuity and perversity of bacteria, if we may speak teleologically. Certain organisms originally highly sensitive to streptomycin have been found not only to develop a high degree of resistance to the antibiotic but even to become finally incapable of growing in its absence. This surely is one of the most interesting feats in biology. Whether such a mutation to dependence on the antibiotic (if indeed it is a mutation), can arise only in cells which have mutated first to resistance or whether it can occur *ab initio* in the original sensitive population is unknown and not an easy problem to attack. But this again may be a serious practical problem—in experimental animals infected with a streptomycin dependent strain of meningococcus, death followed treatment with streptomycin whereas untreated controls survived. In one recorded case of tuberculosis meningitis, streptomycin dependent organisms were isolated from the cerebrospinal fluid and the patient steadily deteriorated during streptomycin treatment.

What, if any, is the practical outcome of all this? From the facts already available certain conclusions can clearly be drawn :—

1. Antibiotics must be used in large doses. A small dose may allow too many organisms to survive and some of them may be capable of giving rise to a resistant strain; we must also reckon with a possible stimulating effect of small doses.
2. The *rational* use of more than one antibiotic at a time may diminish the tendency for resistance to appear.
3. The *indiscriminate* use of antibiotics is clearly to be avoided.

4. The organism should be attacked at the right time. Penicillin, for example, rapidly destroys and lyses young actively growing micro-organisms but has no effect on mature cultures which are not actively multiplying. In short, antibiotic therapy is more likely to succeed if it is used in the right dose at the right time against the right organism.

I think it is time now that I stopped because I very much hope we may have some discussion and comments from some of you who know so much more than I do about fields into which I have so rashly ventured. I should like just to return finally to the main theme which I introduced at the beginning. One of the commonest genera, the genus *Proteus*, was so-named after Proteus, the prophetic old man of the sea. " At mid-day Proteus rose from the sea and slept in the shade of the rocks, with the monsters of the deep lying around him. Anyone wishing to learn futurity from him was obliged to catch hold of him at that time ; as soon as he was seized, he assumed every possible shape in order to escape the necessity of prophesying, but whenever he saw that his endeavours were of no avail, he resumed his usual form and told the truth. After finishing his prophecy he returned into the sea."

Well, I have tried to show you that bacteria behave in somewhat the same way. There are times when the bacteriologist finds the most extraordinary and unpredictable things happening to his cultures, when they seem to be turning from Gram-positive cocci into Gram-negative bacilli, when they do none of the things that they ought to do and all the things that they ought not to do. This kind of behaviour is particularly noticeable when they are under the influence of drugs and might easily lead the bacteriologist to despair or to follow their example himself. Certainly he would be right to despair if there were no kind of principles determining the behaviour of micro-organisms ; and one of the main reasons why bacteria make such fascinating objects for study is this combination of constancy with variability always stimulating us to enquire more deeply into the laws—physical, chemical, mathematical, genetic or what you will—which bring some sort of order into the variability of their behaviour.

But I am well aware that my attempts to do justice to this fascinating theme are very inadequate. Thank you very much for listening to me.

Guy's Diary

July		ACADEMIC
		Exhibition. Surgical Department. " Post-operative Chest Complications."
2nd	5.00.	Dr. W. W. Scott, Johns Hopkins Hospital. Films—" Perineal Prostatectomy " and " Ureterosigmoidostomy." Clinical Theatre.
5th	5.00.	Professor F. G. Young. Fifth Addison Lecture.
9th	1.00.	Dr. Hind. Clinical Lecture.
12th	1.00.	Mr. Glover. Clinical Lecture.
	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
13th	1.00.	Dr. Campbell. Clinical Lecture.
14th	10.00.	Sir James Paterson Ross, St. Bartholomew's Hospital. Surgical Departmental Round. Clinical Theatre.
16th	1.00.	Dr. Hardwick. Clinical Lecture.

		SPORT
7th	2.30.	Cricket. 1st XI *v.* Finchley. (H.O.P.)
		Tennis. 1st VI *v.* Chiswick. (H.O.P.)
		Tennis. 2nd VI *v.* St. Bartholomew's Hospital. (Away.)
8th	2.30.	Cricket XI *v.* Streatham. (H.O.P.)
11th		Tennis. 1st VI *v.* City of London Police. (Away.)
14th	2.30.	Cricket. 1st XI *v.* Private Banks. (H.O.P.)
	2.30.	Cricket. 2nd XI *v.* Private Banks. (Away.)
		Tennis. 1st VI *v.* Paddington. (H.O.P.)
		Tennis. 2nd VI *v.* St Mary's Hospital. (H.O.P.)

Sport

CRICKET

Guy's C.C. *v.* Kingsmead C.C.

At H.O.P. Result—Won by 6 wickets
19th May, 1951
Guy's 181–8 dec. Kingsmead 84

Guy's

D. Allan, b. Harnick	67
N. Cooke, l.b.w., b. Walters	32
W. J. Howells, b. Walters	7
M. Williams, c. Rye, b. Marsh	3
E. Gibbons, b. Marsh	0
D. Lipington, run out	53
M. Willis, c. Webb, b. Stone	8
H. Bissoon Dath, not out	0
F. Trist, not out	9
K. Gray did not bat	
T. Smith " " "	
Extras	4
	181

Bowling : T. Smith, 10.4-3-15-4 ; F. Trist, 3-1-4-0 ; K. Gray, 13-3-35-6 ; H. Bissoon Dath, 3-0-10-0 ; M. Willis, 3-1-11-0.

Guy's C.C. *v.* Bognor Regis C.C.

At H.O.P. Result—Draw
2nd June, 1951
Guy's 152–8 dec. Bognor Regis 137–6

Guy's

N. Cooke, l.b.w., b. Dunlop	27
D. Allan, c. Jaeger, b. Cooper	9
D. Lipington, b. Jaeger	1
P. Pickett, b. Dunlop	8
R. Gibbons, b. Jaeger	1
M. Williams, not out	34
K. Gray, c. Dunlop, b. Cooper	10
M. Willis, l.b.w., b. Dunlop	15
H. Bissoon Dath, c. Pritchard, b. Dunlop	22
M. A. C. Lyon did not bat	
T. Smith " " "	
Extras	21
	152

Bowling : T. Smith, 7-1-23-0 ; M. A. C. Lyon, 8-2-22-1 ; K. Gray, 9-0-28-2 ; P. Pickett, 7-0-29-3 ; H. Bissoon Dath, 4-0-18-0.

Guy's C.C. *v.* Crickets C.C.

At H.O.P. Result—Draw
3rd June, 1951
Guy's 157–8 dec. Crickets 113–6

Guy's

D. Allan, b. Wright	24
N. Cooke, b. Richardson	15
D. Lipington, c. & b. Jackson	41
D. Tunnadine, l.b.w., b. Wright	5
H. Bissoon Dath, l.b.w., b. Wright	2
M. Willis, b. Debley	9
A. Gibbons, l.b.w., b. Debley	5
H. Prentice, not out	30
C. Robinson, l.b.w., b. Crayston	1
F. Trist, not out	13
K. Gray did not bat	
Extras	12
	157

Bowling : K. Gray, 12-2-30-1 ; F. Trist, 5-1-14-0 ; N. Cooke, 8-1-29-2 ; D. Tunnadine, 5-0-17-3 ; H. Bissoon Dath, 4-1-10-0.

Guy's C.C. *v.* Orsett C.C.

At H.O.P. Result—Draw
9th June, 1951
Orsett 108–5 dec. Guy's 96–8

Guy's

D. Lipington, c. Williamson, b. Marshall	28
N. Cooke, c. Bailey, b. Chinnely	4
R. Gibbons, c. Roberts, b. Marshall	3
W. Howells, run out	0
H. Bissoon Dath, b. Marshall	3
J. Willis, st. Williamson, b. Bailey	13
J. Riley, c. Williamson, b. Marshall	2
F. Trist, c. Williamson, b. Bailey	0
M. Williams, not out	14
M. A. C. Lyon, l.b.w., b. Marshall	0
T. Smith, not out	26
Extras	3
	96

Bowling : M. A. C. Lyon, 9-1-36-3 ; T. Smith, 7-0-27-1 ; H. Bissoon Dath, 5-0-22-0 ; N. Cooke, 3-0-6-0 ; M. Willis, 3-0-14-0.

Guy's C.C. *v.* Finchley C.C.

At Finchley. Result—Draw
10th June, 1951
Guy's 173–8 dec. Finchley 156–6

Guy's

N. Cooke, b. Sawyer	4
D. Allan, c. Levy, b. Joy	38
D. Lipington, st. Peskin, b. Joy	72
D. Tunnadine, c. Peskin, b. Joy	26
M. Williams, b. Sawyer	11
W. Howells, l.b.w., b. Joy	5
F. Trist, not out	7
R. Gibbons, b. Joy	1
M. Willis, b. Joy	2
J. Riley did not bat	
M. A. C. Lyon " " "	
Extras	7
	173

Bowling : M. A. C. Lyon, 16-1-48-5 ; F. Trist, 7-3-16-0 ; N. Cooke, 10-2-13-0 ; D. Tunnadine, 2-0-16-0 ; M. Willis, 8-0-45-1 ; J. Riley, 2-0-12-0.

Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Full-time Assistant to the Visiting Dental Surgeons** to commence duties on 1st October, 1951. This appointment provides facilities for study for a higher qualification.

Salary will be £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **13th July, 1951.**

Applications are invited for the post of **Assistant Clinical Pathologist** (whole-time) to the Evelina Hospital, commencing on 1st October, 1951. Salary at the rate of £775 per annum. The appointment will be in accordance with the Terms and Conditions of Service of Hospital Medical and Dental Staff. Forms of application are obtainable from the Superintendent, to whom applications should be sent not later than **14th July, 1951.**

Applications are invited for the post of **Registrar** (whole-time) to the **Orthopædic Department** commencing on 1st October, 1951. Salary at the rate of £775 per annum. The appointment, which involves teaching as well as clinical duties, will be in accordance with the Terms and Conditions of Service of Hospital Medical and Dental Staff. Forms of application are obtainable from the Superintendent, to whom applications should be sent not later than **14th July, 1951.**

Applications are invited for the post of whole-time **Senior Registrar or Registrar** (dependent on experience) to the **Thoracic Surgical Unit,** commencing on 1st October, 1951. The appointment, which involves teaching as well as clinical duties, will be in accordance with the Terms and Conditions of Service of Hospital Medical and Dental Staff. Forms of application are obtainable from the Superintendent, to whom applications should be sent not later than **14th July, 1951.**

Applications are invited for the post of **Registrar** (whole-time) to the **Department of Psychological Medicine,** commencing on 1st October, 1951. Duties will include teaching and in-patient and out-patient work. Salary at the rate of £775 per annum. The appointment will be in accordance with the Terms and Conditions of Service of Hospital Medical and Dental Staff. Forms of application are obtainable from the Superintendent, to whom applications should be sent not later than **14th July, 1951.**

ADDISON LECTURE

The Fifth Addison Lecture will be delivered in the Physiology Theatre on **Thursday, 5th July, 1951,** at 5 p.m., by Professor F. G. Young, Ph.D., D.Sc., F.R.I.C., F.R.S., on " Thomas Addison and the Background to Cortisone." The Chair will be taken by Sir Henry Dale, O.M., G.B.E., F.R.S., M.D., F.R.C.P. Tickets obtainable on application to the Dean.

PASS LIST

UNIVERSITY OF LONDON

Third (M.B., B.S.) Examination for Medical Degrees

April, 1951

Pass

J. H. Bailey   A. B. Dickie

UNIVERSITY OF CAMBRIDGE

M.D.

D. P. Wheatley

ROYAL COLLEGE OF SURGEONS OF ENGLAND

F.R.C.S.

P. L. Blaxter

SOCIETY OF APOTHECARIES OF LONDON

Final Examination

May, 1951

Surgery

*K. V. Cooper

Pathology, Bacteriology and Forensic Medicine

*K. V. Cooper   H. C. Cunningham

Medicine

A. C. D. Abdool Raman   K. V. Cooper
H. C. Cunningham
*R. D. Hernaman-Johnson
K. G. Somers de Haney   B. Vergano

Midwifery

A. C. D. Abdool Raman   *K. V. Cooper
L. J. Bishop   G. E. Sharp

* Have completed the examination.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

EXAMINERS

The following have been elected examiners for the ensuing year :—

Fellowship : Ophthalmology, Applied Physiology and Pathology ; W. R. Spurrell.

Diploma in Physical Medécine, Part I : Dr. E. J. Crisp.

APPOINTMENT

Eric H. Cooper, B.D.S.(Lond.), F.R.S., R.C.S.Eng., has been appointed Consultant Dental Surgeon to the Wigan, Blackpool, Preston, Lancaster and Barrow groups of hospitals.

UNIVERSITY OF LONDON

RECOGNITION OF TEACHERS

Dr. P. M. F. Bishop is recognised as Teacher at the Institute of Obstetrics and Gynæcology in Medicine.

MINISTRY OF HEALTH

The Ministry of Health has made the following appointments and re-appointments to Guy's Hospital to fill vacancies caused by the retirement of members of the Board of Governors. Those now appointed will hold office until March 31st, 1954 :—

Reappointed : Lord Cunliffe (Chairman), Mrs. E. G. M. Barlas, J.P., Mrs. Iris Brook, J. M. H. Campbell, O.B.E., M.D., F.R.C.P., C. J. Conway, K.C., Sir Patrick Ashley Cooper, LL.B., Sir William Kelsey Fry, C.B.E., M.C., F.D.S., O. Gayer Morgan, F.R.C.S., F. J. O. Prescott, L. B. Wimble.

New Member : R. J. Mellish, M.P.

BIRTHS

CRAIG.—On June 17th, 1951, at Bristol, to Jean, wife of R. A. Craig, M.D., M.R.C.P. —a daughter.

SELLEY.—On June 14th, 1951, at the Poltimore Nursing Home, Nr. Exeter, to Audrey, wife of W. G. Selley, L.D.S., R.C.S.—a son (Peter John).

SYKES.—On May 10th, 1951, at High Pine, Bearsted, Nr. Maidstone, Kent, to Moira (née Tomlin), wife of Michael J. L. Sykes, L.D.S., R.C.S.—a daughter (Georgina Jane).

MARRIAGES

CAMAC—SWIFT.—On June 16th, 1951, at Church Gresley Parish Church, John Cramsie Carmac, M.B., B.Ch., M.R.C.S., L.R.C.P., to Joyce Enid Swift.

HARRIS—SIMPSON.—On May 9th, 1951, at Kingston, Surrey, Douglas G. D. Harris, L.D.S., R.C.S., to Doreen P. Simpson of Cobham, Surrey.

SARRE—TAYLOR.—On April 21st, 1951, at St. Giles Church, Sidbury, Devon, Frank Le Cornn, only son of Mr. and Mrs. F. Sarre, of " Avalon," St. Peter Port, Guernsey, and Mary June Taylor, S.R.N., only daughter of Mr. and Mrs. J. E. C. Taylor, of " Lincombe," Sidbury, Sidmouth, Devon.

WHITE—de GROOTE.—On May 14th, 1951, Christopher W. White, to Micheline P. M. J. G. de Groote, at Houthulst, Belgium.

OCKWELL—KEIRLE.—Very quietly at St. Martin-in-the-Fields, London, by the Revd. J. Bullock, assisted by the Revd. W. Denys Giddey, Chaplain to Guy's Hospital, Charles M. Ockwell, M.D., F.R.C.S., of Dartford, to Kathleen M. Keirle, formerly of Thorngrove, Bridgwater, Somerset.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

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PASSIM

FOR the past fifty or a hundred years the rate of progress in Science has accelerated continuously. The employment of new techniques, the application of new engineering devices, the marshalling of larger and larger numbers of workers and the concentration of their energies upon the solution of one single problem has resulted in problems being solved many times more quickly than otherwise would have been possible. The most obvious example of such a method of research is the manufacture of the atomic bomb. In medicine many smaller scale examples may be quoted such as the continuing search for new antibiotics, the progress in immunology, and cancer research.

When, however, one considers the complex background to modern research it is important to bear in mind that the whole structure rests upon the ability of a few scientists whose genius is the ultimate source of progress. The recruitment of new men to these ranks is slowly but constantly taking place and in a decade or so all will have grown up and had their scientific schooling in the "atomic age." We see in this a danger. The danger is that individual research may decline, and the thoughtful experimenter or clinician aided only by a few assistants may be replaced by larger and ever larger research organisations for the result of such an event would surely be a smaller and not a larger total sum of new knowledge—however successfully a few mighty hammers might crack a few tough nuts.

There are, it seems, two answers to the problem. Firstly the encouragement of research in small groups by Government, University and Hospital administrative bodies, and this Hospital certainly need not feel dissatisfied with its record on this account. Secondly, and perhaps more important, the development and encouragement in students of a critical and individual attitude. How best this should be done there are many better qualified than us to decide. Suffice be it to say that at present such an attitude does not seem to be common.

Finally, we would say this : that it is not necessarily the individual student or worker who is most thoroughly read in accounts of recent work elsewhere who will make the biggest contribution. Indeed, this constant watching of the horizon for a new star may often result in the comet over one's shoulder passing unnoticed. Quite as much as recent work, it is in the history of medicine that, apart from new inspiration, may be found large sources of observation and of fact. Facts which, though sometimes ill-understood by those who first noted them, often contain much truth when examined by modern scientists. No better example of this could be found than in the Addison Lecture delivered last week in the Medical School on "Thomas Addison and the Background to Cortisone." Professor Young's address typified the use of the historical background as an inspiration to new advance and the value of a critical and contemplative mind in the problems of "high-powered" modern research.

* * *

We wish to offer our good wishes to Dr. H. W. Barber who, on May 13th, retired from the active staff of the Hospital. Dr. Barber was appointed Physician for Skin Diseases in 1919 and has now been appointed Consulting Physician Emeritus to the Dermatological Department. We know that we speak for his many friends amongst Guy's men in offering him good wishes for the less heavily burdened days which lie ahead and in hoping that he will continue to be seen at the Hospital on not too infrequent occasions.

We offer our congratulations and our welcome to Dr. R. D. Hoare on his appointment as Consultant Neuroradiologist to the Guy's-Maudsley Hospital Neurosurgical Unit. Dr. Hoare comes to us from St. George's Hospital after a distinguished studentship to which he added the experience of four years in the Royal Navy during the war. Recently he has been First Assistant Radiologist of the Atkinson Morley branch of St. George's Hospital where he has been employed on research problems.

Showboat

"AT last Londoners use their lovely river," commented a newspaper correspondent a few days ago, and if it were the Physiotherapists' Summer Dance to which reference was being made, then indeed it was being used to grand and pleasurable advantage. The venture was certainly a novel one and not without risk financially, especially as a few of the creditably more adventurous physiotherapists took it upon themselves to organise this affair without official support or backing—yet it succeeded admirably. May it become an annual event !

At nine o'clock precisely, so the invitations announced, the "Royal Princess" would leave Westminster Pier on Wednesday, 27th June. She was a well-found vessel, admirably skippered and crewed, and well able to accommodate the hundred or so elegantly dressed couples who embarked by the prescribed hour. Such was the sensation caused along the Embankment by the time the gangways were lowered that enormous crowds gathered to watch and to stare. If the South Bank Exhibition was their primary attraction then this was a particular feature to afford their delight.

Dancing on the top-deck, lighted by arcs and garlanded by balloons, was started even before the ship cast off. Music was provided by a three-piece orchestra under unusual and somewhat difficult circumstances.

First making her way across stream, with a nod and salute to the majestic South Bank, the "Princess" steered a course upstream to the greetings of the spectators and the sirens of other craft. At Hammersmith Bridge she put about, and, on the way down again, some of her passengers danced, others took refreshment and a number just talked and gazed.

The Festival Gardens, with all their coloured lights reflected in the water, were a special sight ; the illuminated Albert Bridge nearby formed a brilliant arch. The Tate Gallery, too, showed up to advantage, with the floodlighting upon its well-proportioned columns and, as the Skylon came into full view, we were back at the Westminster Pier again for a brief halt.

Onwards downstream again there was a renewed vigour for dancing, a new hunger for refreshment and, disappointingly, a realisation that the bar had run almost dry.

We ventured as far as Woolwich and, on the way back, a river police launch provided watchful and constant escort through the dark reaches of the Thames. As we finally disembarked at 2.30 a.m. we thought what a night it had been. A noble course had been sailed, the orchestra had acquitted itself with perseverance and distinction, dancing continued to the very end and, if on the aft deck there developed a somnolent cosiness between partners in the shade of the davits, that formed only a contrast to those who went on with spirit and energy undiminished.

Maybe the weather was not ideal, but the rain fortunately held off. A good time was had by all and full credit and thanks are due to the organisers for their brilliant and praiseworthy effort.

Diabetic Acidosis

By J. EAGER HOWARD, M.D.

A lecture delivered at Guy's Hospital Medical School on 21st June, 1951.

LADIES AND GENTLEMEN.—This is the first time that I have met with you collectively and will hence take the opportunity to tell you how much it means to have the privilege of being for a month within these walls where so much medical history has been made.

To the subject of today's discussion I cannot add anything that is new, but from my own experience and the work of others will attempt to expose the background of altered physiology which allows diabetic acidosis to come about, and from this develop a therapeutic approach which seems rational in the present state of our knowledge.

In metabolic diseases one may with profit borrow methods from surgical colleagues. The surgeon in setting a fracture determines the forces which brought about the fracture and displacement and then reverses those forces. This approach will be adopted today in so far as we can do it with our available information.

We shall have to begin with a *premise,* namely that diabetic acidosis and coma result directly from a single defect—namely an *inadequate amount of effective insulin.* It seems remarkable that twenty-nine years after the discovery of insulin we still do not know how and exactly where insulin performs its action. But our premise does not imply that there is less than the normal quantity of insulin present, nor yet that there may be antagonists present which render the insulin inert. To discuss the many conflicting concepts which have arisen from the clinical and experimental observations on the disease syndrome known as diabetes would require many hours and would also be beyond my competence.

THE DIABETIC PROCESS

One of the most valuable pieces of diabetic experimental work was carried out by Atchley, Loeb and their co-workers, in 1933, when they withdrew insulin from two diabetic medical student volunteers and observed by blood and balance studies the consequences of the withdrawal. Here, in essence, is what happens :—

The blood sugar rises, at first, presumably, from failure properly to utilise glucose at the periphery. This failure signals for breakdown of liver glycogen (glycogenolysis) and then for the formation of new glycogen from protein stores (gluconeogenesis). These are physiological trends similar to those of simple starvation only much greater in degree ; and likewise ketone acids are produced by the liver in ever increasing amounts—far more than can be possibly used by the tissues in their change over from being coal (carbohydrate) burners to oil burners (fat). The protein for the gluconeogenesis is furnished by the protoplasm of the tissue cells ; and along with the protein go in relatively proportionate fashion the other intracellular constituents such as potassium, phosphorus and sulphur which pass out in the urine in large quantities. Large negative balances of sodium, potassium, etc., thus arise and, before long, *cellular depletion.* In severe insulin deficiency this amounts to many fold the cellular losses sustained in simple starvation. Cell water loss, of course, accompanies.

Now coincident with, and due to, the hyperglycæmia, glucosuria and its consequent diuresis set in, depleting the extracellular water compartment and carrying along considerable quantities of sodium and chloride. Further piling up of ketonic acids (those excreted soon take along with them sodium, for the ammonia mechanism fails to keep up with the requirements and this further depletes fixed base) results in more and more displacement of bicarbonate. So we have really now a pretty clear series of events and reasons leading to the bedside and laboratory findings of the severely acidotic patient, namely :—

(1) Dehydration—manifested by dry skin and fauces, soft eye balls, extreme thirst.

(2) Acidosis—manifested by Kussmaul breathing ; acetone in breath.

(3) Urine loaded with sugar and ketones.
(4) High blood sugar and low bicarbonate.
(5) High Hæmatocrit and serum protein concentration—further manifestations of dehydration.
(6) Elevation of non-protein nitrogen frequently found—probably due to dehydration.
(7) B.P. lower than usual for the patient.

Symptoms and signs *not* adequately explained as yet :—

(1) Drowsiness often to complete coma.
(2) Severe abdominal pain—often requiring surgical exploration to rule out acute abdomen.
(3) Albuminuria and thick, short casts known as coma casts.

What to do About it

(1) *Give insulin,* and give anough. The trend recently has been to use larger and larger initial doses, some even advising doses of 500 to 1,000 units initially, if the situation is severe. We have not used such large amounts, being content with 100 units in the severe cases and 50 units per hour until the carbohydrate metabolism has altered, as manifested by falling blood sugar to reasonable limits—say 200 mg., or sharp reduction in glycosuria, and then give smaller doses at less frequent intervals as needed.

(2) *Give fluids,* to expand and protect the extracellular compartment and offset dehydration. We used to use only normal sodium chloride solution by vein but in the past six years have only begun with this and given about 2 litres. The reason for this is that balance data showed that we gave far too much sodium and chloride for replacement requirements, a consciousness of the intracellular needs as outlined above, and the observation that *once sugar is being utilised again* potassium is accepted by the cells in large amounts—indeed, if it is not given, there may be dangerously low values of serum potassium. Potassium administration will be dilated on further along ; suffice it here to say that once there has been noted fall in blood sugar or decrease in glycosuria sodium chloride (after 2 litres) is stopped and a potassium chloride and glucose mixture—the former about 30 m.eq. per litre, the latter 5%, are begun. This is continued until the patient is conscious and well enough to take oral nourishment with safety.

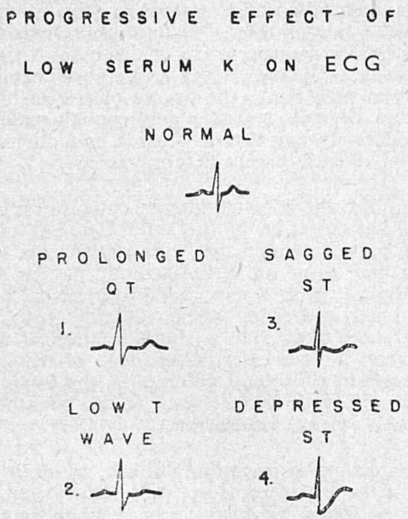
(3) *Alkalis.* Administration of alkalis is controversial but in the severely acidotic patients we use it and believe it has at times been life-saving. The point need not be belaboured here, but if it is to be given we prefer 300 to 500 cc. of 5% sodium bicarbonate given along with or after the first litre of normal saline, rather than to use sodium lactate.

Another controversial topic is early introduction of glucose. The advocates of this procedure feel that high blood sugar will compel greater utilisation of glucose and the more rapid laying down of glycogen—which indeed seems true—but we have remained cool to the importance of this as compared with certain disadvantages, and do not administer glucose until glucose utilisation has begun.

Potassium

Now to return to the potassium. The cells are depleted of potassium as outlined above, but at the time therapy is begun the serum potassium is almost invariably high or normal. However, when the blood sugar begins to fall, indicating cessation of gluconeogenesis and beginning glucose utilisation, there occurs a prompt fall in serum potassium together with serum phosphorus. Presumably potassium is going back into the cells at a rapid rate. At any rate when one administers potassium at this point the administered potassium disappears into the cells at an amazing rate.

It is stated by some authors that administration of potassium is never necessary unless glucose has been used early. We can positively deny this and have seen the serum potassium fall below 2 m.eq. in a patient to whom only normal saline and insulin had been given. Furthermore, our balance data have shown no strict correlation between the degree of glycosuria or the volume of urine and the quantity of potassium excreted in the urine.



Hypokalæmia is most readily detected by the electrocardiogram, and its repeated use or that of the cardioscope is urged, for one may also detect by its use hyperkalæmia which might result from too vigorous use of potassium.

Last year Dr. Doris Berlind examined the charts of all patients dying with diabetic acidosis in the Johns Hopkins Hospital and in whom the pathologist could find no anatomical cause for death. That is to say they were not patients with cerebral accidents, coronary thrombosis, heart failure, acute infection or the like. From the clinical records and electrocardiograms in some it seemed clear to us that hypokalæmia was the cause of death in five of the seven.

Severe degrees of hypokalæmia may be recognised clinically by the extraordinary paralysis which it induces. After perhaps a little tingling of the extremities weakness develops to flaccid paralysis of the peripheral musculature. The tendon reflexes disappear and the breathing becomes so shallow as to be barely perceptible, due to paralysis of the respiratory muscles. I clearly recall seeing two patients die in this manner prior to recognition of the true situation. With everything seeming to go well, blood sugar falling, carbon dioxide rising, no evidence of shock, the respiration rather abruptly changed from the deep sighing Kussmaul type to shallow rapid and short gasps, and the patients expired.

In emphasising the value of potassium to these patients I am aware that other intracellular constituents may also be needed and have so far been neglected. There is also a magnesium deficit as the state of diabetic acidosis is developed and further study may show that this element, too, should be provided. Phosphorus falls in the serum just as does potassium when glucose utilisation begins, and some physicians have administered phosphorus with the belief that they had more rapidly improved the cerebral status.

Caution should be exercised in potassium administration, but if one follows the patient with the electrocardiogram and does not inject potassium too fast, so that the concentration reaching the heart never exceeds 6 or 7 m.eq., we have seen no harmful effects in a six-year experience. It would be wise to use greater caution perhaps in patients with severe renal damage or with small urinary volume.

I should like now to turn to certain other therapeutic and precautionary measures which we have found most useful in the therapy of diabetic acidosis.

SHOCK

The patient who enters the accident ward in deep coma after many hours without attention and dies soon thereafter usually presents the clinical picture of " shock." This is likewise the mode of death most common during the early phases of treatment. We have never been able to correlate uncomplicated death in diabetic coma with either the degree of rise in blood sugar or the lowering of the carbon dioxide, and strangely enough patients will be seen in coma with only moderately low carbon dioxide and others will remain quite alert with the carbon dioxide barely determinable.

When patients go into shock or circulatory collapse for any reason there is almost invariably a concentration of the solid elements of the blood. The blood pressure falls, pulse rate increases, cyanosis appears and generally there is sweating. Shock may come on in the acidotic patient at any time in the early stages of treatment, even where therapy seems to be proceeding well with falling blood sugar and rising carbon dioxide. Just how this situation comes to pass is no more clear than is shock in surgical conditions or other intoxications, but when it does exist transfusions of whole blood or plasma should be used to sustain the blood volume, in the hope that the damaged internal mechanisms will right themselves. It has been our impression that blood so used has been at times life-saving.

To aid in the detection of impending shock, in addition to careful and repeated recording of the blood pressure, pulse, and colour of the patient, it has been our custom to follow the hæmatocrit. Where intravenous therapy is given the hæmatocrit value nearly always falls, indicating a desirable dilation of the blood and an expanding blood volume. When the hæmatocrit does not fall or even rises, it indicates that the intravenously introduced fluid is passing out of the vascular bed as fast as you are putting it in, and this is an indication of impending shock and should be of grave concern. It is a comforting feeling to know that after 2–3 hours of therapy the hæmatocrit has fallen 5 to 10 mm., for it has been our experience that this circumstance has not thus far been associated with any patients who have developed circulatory collapse—except for those developing acute gastric dilation.

GASTRECTASIS

Gastrectasis can unquestionably result in " shock," though to our knowledge there has never been advanced a satisfactory explanation as to how this is brought about. Patients with severe diabetic acidosis are prone to develop hæmonhagic gastritis and gastric dilation. This is why we have never approved of feeding such patients either orally or through a tube until recovery is well advanced. *The stomach is not washed out as a routine ; but when circulatory* collapse impends or has supervened this procedure is certainly indicated. The dramatic restoration of the circulation within a few minutes after removal by lavage of a litre or more of stomach contents is one of the most satisfactory experiences a doctor may enjoy.

VENOUS PRESSURE

Another worth-while procedure is to take frequent readings of the venous pressure. This may be easily performed by using a 3-way stop-cock and a sterile manometer, readings being taken with the solution which is being infused. As a student the first patient I ever saw treated for diabetic coma died suddenly in pulmonary œdema, about an hour after insulin and intravenous therapy had been started. The physician had no idea that all was not going well. This spectacle made a lasting impression. Cardiac strain or myocardial damage is not easily recognised in the urgency of a diabetic crisis. In severe acidosis dehydration is extreme, and speedy introduction of considerable quantities of fluid is called for. Furthermore the circulation may be seriously affected ; pressure in the veins may be so low as to require surgical cut-down for the insertion of a needle. Under these circumstances, administration of fluids by the more conservative subcutaneous route is of limited value.

In the absence of heart failure, the venous pressure at the beginning of therapy is apt to be low, rising rapidly to normal as 1 to 2 litres of fluid are introduced. Should the venous pressure rise above 10 to 12 cm. of water, the infusion rate is slowed. On several occasions such rises in pressure have been accompanied by the appearance of dependent râles, which promptly disappear with slowing of the infusion rate. Our cardiological confréres agree as to the usefulness of sequential venous pressure readings in all patients who are receiving large quantities of fluids intravenously at rapid rates.

To simplify the problems and to highlight certain features of the pathological physiology, the patient with uncomplicated acidosis has been discussed. Often however, some serious other disease process is present and indeed is the cause of the acidosis. Acute infection, surgical abdomen, hypertension, myocardial infarction, cerebral accident or the like cause the doctor to exercise all his ingenuity. For therapy must be a matter of judicious compromise, lest measures directed against one pathological system might prove deleterious to another weakened system and thus disastrous for the whole.

Film for the School of Nursing

Recently a film was shown to an invited group of sister tutors and ward sisters in the School of Nursing.

The film, which is in colour and runs for 16 minutes, demonstrates the technique of bathing a sick baby and is intended for use in conjunction with classes to student nurses. Together with the film a 4-page leaflet, recapitulating the procedure step by step as seen in the film, has been prepared and this will be given to the student nurses for future reference.

It is thought that this is one of the first films of this kind to be made by the photographers, artists and nursing advisors of a hospital for its on School of Nursing.

The scenes were filmed in the Children's Ward at Guy's and will be available to other hospitals if required.

Guy's Science Club

Seventh Annual Report, 1950—51

THE Club has had a further successful year's activity, interest in its meetings being well maintained. The average attendance at the six scientific meetings was forty-five. Through the kindness of Dr. Keith Simpson it was also possible for some forty members to visit an interesting scientific exhibition in the laboratories at New Scotland Yard. The invited speaker from outside the Hospital was Dr. E. Eric Pochin, Director of the Medical Research Council Clinical Research Unit at University College Hospital. This meeting was also very successful.

The subjects discussed were :—

" The Clinical Use of Radioactive Isotopes," by Dr. E. Eric Pochin.

" Some Problems in the Evolution of the Divided Heart," by Mr. G. Foxon.

" Disturbances of Potassium Metabolism," by Dr. B. McArdle.

" Recurrent Abdominal Pain in Children," by Drs. D. O'Neill and R. G. MacKeith.

" Local Tetanus," by Professor G. Payling Wright.

" Bacterial Variation and Chemotherapy," by Professor R. Knox.

The Committee expresses its grateful thanks to those who have opened the discussions, to their respective chairmen, to the Dean for his continued permission to hold meetings in the comfort of the Common Room, to the Common Room Staff for their co-operation and for serving tea, and to Mr. K. Twinn and all others who have assisted with the technical and other arrangements.

The Addison Lecture

THE Fifth Addison Lecture was given on July 5th in the Physiology Theatre by Professor F. G. Young, F.R.S. His address, which was delivered to a large audience, was entitled " Thomas Addison and the Background to Cortisone." Sir Henry Dale was in the Chair and introduced Professor Young. In doing so he referred to the latter's work as Professor of Biochemistry at Cambridge and to their mutual friendship over many years.

Dr. Bishop spoke briefly to explain how, through the generosity of Dr. Harry Spon, who at 83 was present today, it had been possible to establish this annual lecture with a view to fostering interest at Guy's in endocrinology. In the previous four years speakers from this country had alternated with others from abroad. The first Lecture was delivered by Professor E. C. Dodds, the second by Dr. E. B. Astwood of Boston, the third by Sir Henry Dale, and last year the fourth had been given by Professor George Corner of Baltimore.

Amongst the audience, which consisted chiefly of a large number of the Guy's Staff and a smaller number of students, there were several welcome and notable visitors. In particular, Professor E. C. Dodds, Sir Charles Harington and Professor Houssay from Buenos Aires.

Professor Young's address was spoken with a clarity and careful choice of words which was fully appreciated by the most distant members of the audience. In opening his address he remarked that, asked for his choice, he had chosen Sir Henry Dale to be Chairman on the occasion. He went on to review Addison's contribution to endocrinology. He spoke, he said, as a biochemist, for he was not a doctor, he was, incidentally, the first Addison lecturer who did not have medical qualification. He then added some pertinent remarks about the dangers of a too rigorous application of the statistical method in assessing new discovery. Addison's original cases of disease of the suprarenal capsules numbered only eleven. Pierre Marie's original cases of acromegaly only two. Professor Young continued by tracing the origins of the idea that there might be chemical as well as nervous integration of the body. He referred to some early remarks of Thos. Addison, to some of Gowland Hopkins and to the work of Claude Bernard. Next, he spoke of certain diseases which are now known to result from endocrine upsets. In doing so he referred to the work of Hilton Fagge in 1871 on Cretinism, of Wm. Gull on Myxœdema, to Murray's Thyroid Extract given for Myxœdema, and to Houssay's work before the end of last century when the supravenal cortex was shown to be vital. This was followed by mention of Bayliss, and Starling's work on chemical messengers in 1902, and Banting and Best's work on Insulin in 1922, and H. M. Evans' work on Anterior Pituitary Extract.

Professor Young went on to refer to the more modern endocrine substances which had been discovered and then dealt in some detail with the discovery of Kendall's " Compound " E and the effects which Hench was subsequently able to produce with this substance.

It was a carefully prepared and thoughtful address which might best be described in the words which Sir Henry Dale used in thanking Professor Young for his lecture—for his " wide ranging and philosophical remarks and for his excellent and interesting lecture."

SONNET

When I recall those days of summer spent
By Dartmoor's edge, and Bovey's flower-starred banks ;
When I remember magic miles I went
Across the moor, and climbed the sky-mixed ranks
Of tors, or waded where the streams were pent ;
How many happy thoughts, of merry pranks,
Of distant blues and scents the hillsides lent,
Come crowding to my mind : the woolly flanks
Of sheep thrust deep into the brakes, of bent
Storm-ridden trees, of ravens' hoarse laments,
And lovers murmuring hid ! But most what sent
A riot through my veins (with halting thanks),
    Was when a backward glance recalled the joy
    Oft' shared with Her whose heart has no alloy

Governors and Staff Dinner

ON June 1st a Dinner was given by the Governors and Staff of Guy's Hospital at the Park Lane Hotel. After dinner the Toast of His Majesty, the King, was proposed by the Chairman. Dr. W. Russell Brain then proposed the Toast of Guy's Hospital and Schools and the reply was given by Mr. E. G. Slesinger. The health of the Guests was then proposed by Sir Heneage Ogilvie and, on their behalf, The Rt. Hon. Hilary Marquand, Minister of Health, replied. Finally, Professor J. Whillis proposed the health of the Chairman, the Rt. Hon. Lord Cunliffe.

A list of those who accepted invitations to be present is given below :—

The Rt. Hon. Lord Cunliffe, *Chairman.*
The Rt. Hon. Hilary A. Marquand, M.A., D.Sc., M.P., *The Minister of Health.*
Dr. W. Russell Brain, M.A., D.M., *President of the Royal College of Physicians.*
Mr. E. G. Slesinger, O.B.E., M.S., F.R.C.S., *Vice-Chairman of the Board of Governors, Guy's Hospital.*
Professor Lillian Penson, D.Litt., LL.D., Ph.D., *Vice-Chancellor of the University of London.*
Mr. Henry Ward, *Member of the Court of the Clothworkers' Company.*
Mr. A. W. Hall, *Architect to the Hospital.*
Mr. W. M. Mollison, C.B.E., M.Ch., *Chairman, School Board.*
Mr. W. F. Cook, *Secretary, Medical School, Guy's Hospital.*
Mr. K. I. Julian, C.B.E.
Professor T. B. Johnston, C.B.E., M.D.
Mr. D. C. Sidebottom.
Mr. B. Lees Read, O.B.E., A.C.A., F.H.A., *Clerk to the Governors.*
Dr. E. R. Boland, C.B.E., F.R.C.P., *Dean of the Medical School, Guy's Hospital.*
Dr. D. W. Logan, D.Phil., M.A., B.C.L., *Principal of the University of London.*
Sir Heneage Ogilvie, K.B.E., M.Ch., M.S.
Professor J. Whillis, M.D., M.S.
Mr. Edwin S. Hoare, *Consulting Engineer to the Hospital.*
Mr. F. W. Beek, *Ministry of Health Liaison Officer.*
The Rev. Denys W. Giddey, *Chaplain to the Hospital.*
Miss D. M. Smith, O.B.E., *Matron.*
Mr. J. E. Coomber, *Clerk to the Clothworkers' Company.*
Mr. W. D. Doherty, M.Ch., F.R.C.S., *The Medical Superintendent.*
Mr. F. S. Warner, M.R.C.S., L.R.C.P., L.D.S., *The Dental Sub-Dean.*

TABLE 2
Dr. Alan Angus, M.D.
Mr. S. B. Askew.
Mr. F. Bocquet Bull, M.R.C.S., L.R.C.P., F.D.S.
Mr. R. S. Lawrie, M.D., F.R.C.S.
Mr. W. E. S. Bain, F.R.C.S.
Mr. D. F. L. Cook, L.D.S.
Dr. J. H. Baylis, M.B., B.S.
Dr. K. Malcomson, F.R.C.S.

TABLE 3
Mr. R. Davies-Colley, C.M.G., M.Ch.
Mr. H. J. B. Atkins, M.Ch.
Mrs. Iris Brook, S.R.N., S.C.M.
Dr. R. C. MacKeith, D.M., M.R.C.P.
Mr. P. L. Blaxter, M.A., M.B., B.Ch., D.O.M.S.
Mr. B. G. E. Donner, B.D.S.
Dr. T. H. S. Burns, M.B., B.S., D.A.
Mr. M. Malleson, L.D.S.

TABLE 4
Dr. C. G. Baker, O.B.E., M.D., F.R.C.P.
Mr. F. N. Doubleday, F.D.S., M.R.C.S.
Dr. W. N. Mann, M.D., F.R.C.P.
Dr. S. H. Bockner, M.R.C.S., L.R.C.P.
Mr. G. B. Elphicke, B.D.S., D.D.S.
Dr. P. J. Collard, M.R.C.P.
Dr. I. Macdonald, M.B., B.S., D.R.C.O.G.

TABLE 5
Alderman R. H. Burslem, J.P.
Mr. J. S. Batchelor, F.R.C.S.
Colonel E. B. Dowsett, D.S.O., F.D.S., M.R.C.P.
Mr. J. W. Mansie, F.D.S., M.R.C.S.
Dr. M. G. D. Davys, B.M., B.Ch.
Mr. A. A. W. Fooks, D.D.S., L.D.S.
Dr. L. C. Cook, M.D., D.P.H.
Mr. D. J. Anderson, B.D.S.

TABLE 6
Dr. J. M. H. Campbell, O.B.E., M.D., F.R.C.P.
Mr. Harold C. Edwards.
Dr. P. M. F. Bishop, D.M.
Dr. I. R. Marre, M.R.C.S., L.R.C.P.
Dr. D. C. Deuchar, M.B., B.S.
Mr. D. M. Griffith, B.Sc.
Dr. C. J. Earl, M.D., M.R.C.P.
Mr. I. G. Anderson, B.Sc., Ph.D.

TABLE 7
Dr. C. E. Iredell, M.D.
Mr. C. A. Chadwyck-Healey, O.B.E.
Mr. J. B. Blaikley, F.R.C.S., F.R.C.O.G.
Dr. A. D. Marston, F.F.A., F.R.C.S., L.D.S.
Mr. T. A. R. Dinning, F.R.C.S.
Mr. C. I. Hagger, L.D.S.
Mr. E. Gwynne-Evans, M.B., B.S.
Mr. R. W. R. Baker, B.Sc.

TABLE 8
Mr. J. F. Carter-Braine, M.D., F.R.C.S.
Mr. W. Lindsay-Locke, M.B., Ch.B.
Dr. W. S. McConnell, M.B., B.S., D.A.
Dr. C. N. d'Eastes, M.B., B.S., D.L.O.
Mr. T. J. Hancock, B.D.S., D.D.S.
Dr. P. A. I. Gorer, D.Sc., L.R.C.P., M.R.C.S.
Mr. F. H. Brain, M.A., Ph.D., B.Sc.

TABLE 9
Sir John Conybeare, K.B.E., M.C., M.D., F.R.C.P.
Dr. G. Marshall, C.B.E., F.R.C.P.
Mr. R. C. Brock, M.S.
Dr. E. J. Moynahan, M.R.C.S., M.R.C.P.
Mr. J. T. M. C. Jenkins, M.R.C.S., D.L.O.
Mr. J. G. Hancock, B.D.S.
Dr. H. E. Holling, M.R.C.P.
Dr. J. H. F. Brotherston, M.B., B.S., D.P.H.

TABLE 10
Mr. A. Bulleid, F.D.S., M.R.C.S.
Miss D. E. Dovell.
Dr. J. L. Moffatt, M.B., B.S.
Mr. R. J. Hart, D.D.S., L.D.S.
Dr. J. C. Houston, M.D.
Mr. W. J. R. Calvert, M.A., Ph.D.

TABLE 11
Dr. E. V. Evans, O.B.E., D.Sc.
Dr. N. Mutch, M.D.
Mr. P. W. Clarkson, F.R.C.S.
Dr. C. T. Potter, M.D., L.C.P.S.(Quebec), F.R.C.P.
Mr. L. Whytehead, F.R.C.S.
Mr. G. S. Loader, F.D.S.
Mr. F. L. Ingram, M.R.C.S., L.D.S.
Dr. A. F. Ross, M.B., B.Ch.

5
6
7
9

TABLE 12

Mr. A. W. Ormond, C.B.E., F.R.C.S.
Dr. E. J. Crisp, M.D.
Mr. G. B. Pritchard, F.D.S., M.R.C.S.
Mr. J. R. Addison, F.R.C.S.
Mr. R. E. Matthews, B.D.S.
Dr. C. L. Joiner, M.R.C.P.
Mr. P. R. Rowland, M.Sc.

TABLE 13

Mr. E. A. Scott, M.R.C.S., D.A.
Mr. N. L. Eckhoff, M.S.
Mr. A. B. Kennedy, J.P., L.C.C.
Mr. P. V. Reading, M.S.
Dr. D. M. Carnegie, M.B., B.S., D.A.
Mr. J. W. McLean, L.D.S.
Dr. M. B. King, M.B., B.S.
Mr. M. V. Stack, B.Sc.

TABLE 14

Mr. O. Gayer Morgan, M.Ch., F.R.C.S.
Dr. J. H. Ryffel, B.Ch.
Mr. Murray A. Falconer, M.Ch., F.R.C.S.
Dr. E. H. Rink, B.M., B.Ch., D.A.
Dr. W. R. Cole, M.A., M.B., B.Ch., D.M.R.E.
Mr. B. W. Pett, B.D.S.
Dr. J. O. Laws, M.R.C.P.
Mr. R. W. Stanford, M.A.

TABLE 15

Dr. L. Forman, M.D.
Mr. R. J. Mellish, M.P.
Mr. Philip Turner, M.S.
Mr. R. E. Rix, F.D.S., M.R.C.S.
Dr. D. G. H. Davies, M.R.C.S., L.R.C.P., D.A.
Mr. A. Rand, L.D.S.
Mr. B. McArdle, M.D.
Mr. G. A. Thomas, Ph.D.

TABLE 16

Dr. A. Talbot Rogers, M.B., B.S.
Mr. G. F. Gibberd, M.S.
Dr. B. Buckley Sharp, M.D., M.R.C.P., M.R.C.S., D.P.M.
Dr. R. T. Grant, M.D., F.R.S.
Dr. H. T. van Diggelen, M.B., Ch.B.

TABLE 17

Professor W. R. Spurrell, M.C., F.R.C.S.
Mr. F. N. Glover, M.S.
Dr. S. G. Shippard, M.R.C.S., L.R.C.P., D.A.
Dr. E. D. Y. Grasby, M.D.
Dr. J. R. E. Dobson, M.B., Ch.B., D.P.M.
Mr. A. D. Robinson, B.D.S.
Mr. N. Thompson, M.B., B.D.S.

TABLE 18

Dr. C. Hardwick, M.D., F.R.C.P.
Dr. D. Stafford-Clark, M.D., M.R.C.P., D.P.M.
Professor W. E. Herbert, F.D.S., M.R.C.S.
Mr. A. J. Drew, F.R.C.S.
Mr. W. Rotherham, B.D.S., M.D.S., M.B., Ch.B.
Dr. D. A. Osborn, M.B., B.S.
Mr. J. Crossley, F.R.C.S.

TABLE 19

Dr. T. A. B. Harris, M.B., B.S., D.A.
Mr. Leslie B. Wimble.
Mr. T. T. Stamm, F.R.C.S.
Dr. J. B. Enticknap, M.B., B.S.
Mr. A. H. R. Rowe, B.D.S.
Dr. E. G. B. Reeve, M.R.C.P.
Dr. G. F. Stoddart, M.B., B.S.
Mr. T. R. L. Finnegan, M.B., B.S.

TABLE 20

Mr. W. E. Tanner, M.S., F.R.C.S.
Dr. P. J. Helliwell, M.B., B.Ch., D.A.
Dr. G. M. Evans, M.B., B.S., M.R.C.O.G.
Mr. H. A. Ripman, M.B., B.S., M.R.C.O.G.
Dr. W. N. Thomson, M.B., Ch.B.
Dr. W. Fox, M.B., B.S.

TABLE 21

Mr. Allen R. Thompson, B.D.S., L.R.C.P., M.R.C.S.
Dr. A. W. Hind, M.B., B.S., L.R.C.P.
Dr. J. B. Fulton, M.B., B.Ch., B.A.O.
Mr. G. F. Thompson, L.D.S., R.C.S.
Dr. C. K. Simpson, M.D.
Dr. M. G. Thorne, M.R.C.P.
Mr. G. E. H. Foxon, M.A., M.Sc.

TABLE 22

Mr. R. O. Holland, M.R.C.S., L.D.S.
Mr. Leonard Gluckstein.
Mr. S. H. Wass, M.S., F.R.C.S.
Dr. J. V. Gordon, M.D., M.R.C.P.
Mr. D. F. Waller, L.D.S.
Dr. J. G. Stebbing, M.B., B.S.
Mr. D. J. Tibbs, F.R.C.S.
Mr. R. D. Gain, L D S.

TABLE 23

Dr. R. L. Waterfield, M.R.C.P.
Mr. K. Hooper, F.D.S., M.R.C.S.
Mr. H. P. Guerrier, F.R.C.S.
Miss J. Nicholson, B.Sc.
Dr. A. Batty Shaw, M.R.C.P.
Mr. R. N. Ticehurst, F.R.C.S.
Mr. W. L. G. Gent, Ph.D., B.Sc.

TABLE 24

Dr. A. M. Hutton, M.R.C.S., L.R.C.P., D.A
Sir Edward J. Reid, Bart.
Mr. A. B. Wayte, M.R.C.S., L.R.C.P., D.M.R.E.
Mr. D. H. Keller, F.R.C.S.
Miss A. Shore, Ph.D., B.Sc., F.R.I.C.
Mr. N. S. McKie, L.D.S., R.C.S.
Mr. J. D. Trethowan, F.R.C.S.
Mr. P. C. Grummitt, B.D.S.

TABLE 25

Professor J. M. Robson, M.D.
Dr. R. Kauntze, M.D.
Dr. P. L. Masters, M.B., B.S.
Mr. R. D. Emslie, B.D.S., M.Sc.
Dr. G. W. Scott, M.B. B.S.
Dr. J. R. Trounce, M.D. M.R.C.P.
Mr. G. Holding, B.D.S.

TABLE 26

Lt.-Col. Eric G. Waley, O.B.E.
Mr. H. H. Kenshole, F.D.S., M.R.C.S.
Mr. G. E. Tunnicliffe, LL.B.
Professor M. A. Rushton, M.A., M.D., F.D.S.
Mr. J. McA. McArthur, F.R.C.S.
Mr. W. J. Tulley, B.D.S.
Dr. D. G. Vulliamy, M.R.C.P.
Dr. J. N. Hunt, M.B., B.S., Ph.D.

TABLE 27

Mr. H. D. Walston.
Mr. F. R. Kilpatrick, M.S., F.R.C.S.
Mr. C. C. Palmer.
Professor G. Stead, M.A., D.Sc.
Dr. I. C. K. Mackenzie, M.D.
Mr. W. A. Vale, B.D.S.
Dr. A. Venner, M.R.C.P.
Dr. J. Joseph, M.B., Ch.B., M.R.C.O.G.

TABLE 28

Dr. J. F. Lascelles-King, M.B., B.S., M.R.C.S., L.R.C.P.
Mr. C. Scriven.
Dr. C. Hewitt-Atkinson.
Professor R. H. S. Thompson, D.M.
Dr. E. V. Medhill, M.B., B.S., D.M.R.E.
Dr. C. B. Allsopp, C.B., Ph.D.
Dr. D. R. C. Willcox, M.B., B.S.
Dr. P. H. Mitchiner, M.S.

TABLE 29

Mr. F. W. Law, M.D., F.R.C.S.
Mr. J. N. McLean.
Mr. J. H. E. Winston, F.C.I.S.
Mr. L. F. W. Salmon, M.S., F.R.C.S.
Dr. K. F. Anderson, M.B., B.S.
Mr. R. D. W. Stileman, L.D.S.
Dr. B. H. Pentney, M.R.C.S., L.R.C.P.

Correspondence

Increased Prices for Meals

SIR,—The rises in the cost of food and overheads, in spite of every effort to reduce overhead costs, make it necessary to increase the price of meals in the College and Staff Common Room as from 16th July, 1951.

The Balance Sheets may be seen in the Medical School Office (the offices of the Guy's Hospital College Catering Company) but briefly, it is sufficient to mention that while the Company could pay its way in 1939, increases in wages, cost of foods and overheads since that date, and in particular the rises in price during the past six months of almost every essential stock-in-trade of caterers, have not been covered by corresponding increases in the prices of meals served, which are now necessary if the Company is to pay its way.

In the Dining Room and Staff Common Room prices of the main dishes and sweets will be increased slightly and in the Dining Room the prices of the set three course lunch and dinner will be increased from 2*s*. 6*d*. to 2*s*. 10*d*. The present set lunches in the cafeteria will be discontinued and a choice of main dishes with two vegetables will be available at a cost of 1*s*. 4*d*. and 1*s*. 6*d*., and buffet and snack lunch facilities will be improved. Soup, sweets, rolls, butter and cheeses will be available as required. The cost of breakfast will vary slightly according to the market price of raw materials.

Meals can be obtained in the College which compare favourably in quality and price with those obtainable elsewhere and increased use by the students would help to keep down the overall charges and ensure that the Catering Company would be able to pay its way.

Suggestions from students for ways of improving the catering facilities are welcomed and may be made through the student representatives, Messrs. D. P. Adamson and J. Dennis, or written in the suggestions books kept by the cashiers in the Cafeteria and Dining Room.

Yours, etc.,

E. R. BOLAND,
Chairman,
Guy's Hospital College Catering Company Ltd.

United Hospitals Festival Choir

SIR,—A little over a year ago the first plans were laid for the formation of a United Hospitals Festival Choir. These were fully realised on the 30th May, 1951, at the Royal Albert Hall, when this choir of nearly 500 voices, with the London Symphony Orchestra under Josef Krips, gave its first concert. This was a perfomance of Mendelssohn's "Elijah," and was given in the presence of H.R.H., the Duchess of Kent.

It is the intention of the Choir to devote the proceeds from its concerts to specific medical organisations or charities. Such was the success of its first concert that a donation is to be made to the Royal College of Nursing Educational Fund.

About 50 hospitals contributed to the Choir, Guy's being represented by some 40 students. I hope that encouraged by such an achievement, many more will wish to add their support. This they can do, either by singing or by making widely known future concerts, and thereby help to promote public interest in a very worthy cause.

I am sure that Guy's support will not be lacking.

Yours, etc.,

ALAN R. GRICE,
Hon. Secretary,
United Hospitals Festival Choir.

°*Since receiving this letter we have been informed that the sum donated to the Royal College of Nursing is £300.*—ED.

A Link with Astley Cooper

DR. CHARLES B. BREAREY.

FROM Dr. E. C. Brearey Ibotson of Garston we have had a most interesting account of his great-uncle, Dr. Charles B. Brearey, late of Scarborough. The latter was one of five brothers, the elder of which, Henry, had to get himself qualified as a solicitor to look after the education of the others. Edward was a Brazilian planter, Frederick was the Secretary of the Aeronautic Society, John was a captain in the Merchant Service and Charles was a Guy's man, having been a dresser to Sir Astley Cooper.

Charles, in fact, was born in Scarborough in 1811. He received his early education at the Scarborough Grammar School, after which he became a student under the Rev. E. Rudd, Vicar of Thorne. Following upon that course of study, he was sent, as a private pupil, to Mr. Branson and Mr. Mory (of Doncaster), conjointly, where he might be able to live at the Dispensary, and have the advantage of seeing both public and private practice. As a medical student he made rapid progress. After remaining some time at Doncaster, he went to Leeds, and while there he became acquainted with a gentleman ordered to take a voyage to the polar regions for the benefit of his health. Full of youthful ardour, Mr. Brearey needed no urging to comply with the request that he should accompany his friend, with whom he entered into an arrangement to sail in a whaling ship to Greenland, and thence to Davis Straits—Mr. Brearey officiating as surgeon of the ship. Before the termination of the voyage, Mr. Brearey had amputated sixty toes and a foot, all of which had become gangrenous from the effects of frost. Arrived in England, he proceeded to London, where he commenced his hospital studies, which he pursued at Guy's, under Sir Astley Cooper, and at Grainger's School, in Webb-Street. The Medical School records indicate that he attended lectures in medical jurisprudence and for medical and surgical practice. When those studies were terminated, and the licence of the Hall was obtained, he received an appointment as surgeon in the navy of the Queen of Portugal; but ultimately was appointed to the army, in which he served during the whole of the civil war then raging in that unhappy but lovely country. During this time, he had the misfortune to be shut up beseiged with 7,000 troops, in Oporto, for ten months where, existing on all kinds of desirable and undesirable articles of food, his palate had lost its fastidiousness, and he had learned to relish, and be thankful for, a crust of bread and a cup of pure water. Whilst in this beautiful city, he, necessarily, saw much practice, especially in cases of low fever and dysentery; and, in consequence of being daily engaged with the enemy on some part of the lines, surgical cases of all kinds claimed a considerable share of his attention. The loss of life in the town was very great, from the inability to treat the patients with proper medicines. This circumstance, however, gave Mr. Brearey an insight into the utility of, and a love for, water in the treatment of fevers. He found that after a regulated system of baths of cold water had been adopted by the medical staff, they lost very few cases; though most of those were the very worst that could offer, having originated from low and unwholesome diet, and protracted starvation. Many of the cases of recovery were attended with the loss of one or both legs by mortification. On retiring from the Portuguese service, of which he got tired when the war terminated, he was engaged by the Spanish Ambassador for the service of the Queen of Spain, and was duly appointed to a regiment. The many strange vicissitudes he went through during this part of his career he used in later years to recount to his friends with animation and interest. He had, while thus engaged, abundant practice in military surgery, and again was favoured to witness that most awful description of low fever already referred to, though produced now from a different cause. The troops were exposed, on the mountain-tops and on the plains of Vittoria, to alternate wet and cold, frost and snow, for weeks together, during the coldest part of the year; the bivouac fires being made in a circle, with the men in the centre—officers and soldiers together. The typhoid fever—through the stages of which the patients went very rapidly—left the most dreadful debility, and generally terminated in mortification of the legs. mainly above the ankle. Hundreds were carried off in Vittoria by this fever, and hundreds of cripples told the extent of the amputations resorted to. The efforts of the medical staff were rendered almost abortive from the apathy with which the Spanish authorities treated the requisitions for aid in the hospitals. So far as Mr. Brearey was concerned, however, he, being attached to the staff, fared better than he did when in Oporto, where he took the fever, and also at a later date in San Sebastian, the latter attack being caused by incessant working at the military hospitals, in consequence of some severe general actions, in which large numbers were wounded. At the termination of this war, not relishing a soldier's life with nothing to do, he resigned his commission. Arriving in England, Mr. Brearey commenced practice as a general practitioner, in Great Portland-Street, where he soon made a respectable connection, which in ten years had so much increased that the fatigue arising from the performance of his arduous duties rendered him incapable of further exertion. Having suffered from an attack of inflammation of the brain, and being threatened soon after his recovery with a second, he resolved at the suggestion of his medical attendants, to dispose of his practice, and henceforth to reside at his native place—Scarborough—a short visit to which had previously soon restored his debilitated energies.

The deceased gentleman claimed his descent from an old English family, whose great progenitor was one Allan de Brearhaugh, a redoubtable follower of the gallant Henry of Monmouth, and whose name and fame have been transmitted through five centuries. During his long residence in Scarborough, Dr. Brearey practised his profession, though he never sought a large connection there. He was the author of a little work, which ran through several editions, entitled "The Medical Guide to Scarborough," in which he particularly set forth the advantages of residence at this place as a convalescent resort, the properties and uses of its mineral waters, and the benefits of sea-bathing, on which his advice was well appreciated. He had no ambition for any public office in his native town, but lived a quiet and unostentatious life, respected by all who knew him.

The Breareys furnished two Lord Mayors to York and a Canon to York Minster. They received an Estate and House from the Monks of Bylands Abbey for defending the Abbey. They lived in the house, Middlethorpe Manor, for 200 years. Captain Christopher Brearey cut off the Entail and sold the Estate early in the 18th century. His son (Coroner for Scarborough) and father of Charles Brearey had married against his father's consent. The House, which lies next to the Archbishop's Palace, is now occupied by Sir Frank Terry. John Brearey, the sea Captain, left a son and a grandson but I have lost sight of him ; probably his descendents still exist.

E.C.B.J.

July		ACADEMIC
		Exhibition. Surgical Department. "Post-Operative Chest Complications."
16th	1.00.	Dr. Hardwick. Clinical Lecture. "Pain in the Back."
17th	1.00.	Dr. Baker. Clinical Lecture. "The Aetiology of Coronary Artery Disease."
19th	1.00.	Sir Heneage Ogilvie. Clinical Lecture.
20th	1.00.	Dr. Mann. Clinical Lecture.
23rd	1.00.	Mr. Atkins. Clinical Lecture. "Acute Appendicitis."
27th	1.00.	Dr. MacLean. Clinical Lecture. "Barbiturate Poisoning."
28th	10.00.	Surgical Department. Clinico-Pathological Meeting. Clinical Theatre.

July		SPORT
21st	2.30.	Cricket. 1st XI *v.* Kingsmead. (Away.)
	2.30.	Cricket. 2nd XI *v.* Old Wimbledonians. (H.O.P.)
		Tennis. 1st VI *v.* Private Banks. (H.O.P.)
		Tennis. 2nd VI *v.* Chiswick. (Away.)
22nd	2.30	Cricket XI *v.* Casuals. (H.O.P.)
28th	2.30.	Cricket. 1st XI *v.* Guy's Staff. (H.O.P.)
		Tennis. 1st VI *v.* Mr. Guy Blackburn's VI. (H.O.P.)

The 1951 Festival

By M. D. WARREN, M.B., B.S.

IT has been said that it is just as necessary to look backwards as it is to look forwards in order to see in which direction one is travelling ; for as T. S. Eliot has remarked, " in a world of fugitives the person taking the opposite direction will appear to run away." The object of the present exhibitions which form part of " The Festival of Britain " is to " enable this country and the world to pause and review British contributions to world civilisation in the arts of peace, to make one united act of national re-assessment, and one corporate re-affirmation of faith in the nation's future." How successfully have the exhibitions of medicine reached these ideals ?

At the Wellcome Historical Medical Museum there is an exhibition of " Prehistoric Man in Health and Sickness." To begin with there are tables of geological periods so that the visitor is orientated in time. Then follow a collection of skulls including casts of the famous Swanscombe and Cro-magnon skulls. Contemporary animals are shown and two contemporary scenes illustrate the relationship of the fauna and flora. (It is interesting to note that the dinosaurs were extinct by the time of the Eocene period, which was some 40 million years before man.) Some of the more extraordinary exhibits include a fossilised section of a prehistoric rubbish dump and some fascinating remnants from the Swiss Lake Dwellings (Neolithic period). Owing to some weird chance some of these buildings were burnt and collapsed into the lakes in such a manner and at such a temperature that certain domestic articles were preserved, although in a charred condition. Thus one can now see bread, seeds and cloth from the early stone age. In later sections prehistoric medicine and surgery are exhibited. It is apparent that women adopted the squatting position for childbirth (a position still favoured in the East) and that the most common operation was trephining of the skull. Many explanations have been put forward to account for this operation, but none seem to be entirely satisfactory. Perhaps if we could discover why it suddenly ceased, we could discover why it began.

In the same building there is another exhibition entitled, " Medicine in 1850." Here is a cross-section of medical theory and practice as it was in that year. The exhibition includes the discoveries of the preceding decades that had moulded the present theories or altered the earlier ones. There are portraits of such pioneers as Sir Humphry Davy, Helmholtz, Volta, Ampere, Ohm, Faraday, Dalton, Charles Darwin, John Hunter, Sir William Bowman, Purkinje, Virchow, Pasteur, Laennec, Addison, Graves, Bright, Wilks, Charcot, Chadwick and Sir John Simon, to mention only some of the illustrious nineteenth century figures that are assembled here. The development of such indispensable aids to clinical diagnosis as the stethoscope, clinical thermometer and the sphygmomanometer is illustrated. First or early editions of Gray's Anatomy, Malthus's Population, Laennec's Description of the Stethoscope, Addison's Disease of the Supra-Renals, Bright's Reports of Medical Cases and John Snow's Cholera, are exhibited. This latter book includes the dramatic story of the Broad Street pump with the first epidemiological map. Snow was also the first professional anæsthetist. The exhibition closes with illustrations of environmental conditions such as women working in the mines, Victorian housing, water supply, the London teaching hospitals and finally a tribute to Florence Nightingale who not only created Nursing as we know it, but also was responsible for vast improvements in military medicine and public health.

At the main South Bank Exhibition medicine has received a generous share of the limited space. Under the guidance of Surgeon Vice-Admiral Sir Sheldon Dudley the Health Pavilion shows in a readily intelligible style the present achievements in medicine. The pavilion presents its thesis in the same order that the medical student learns his subjects. It starts with recent advances in physiology discussing the nervous system, cardiovascular system and nutrition. The next section is devoted to the preservation of health and usefully discusses the value of vaccination, diphtheria inoculation, etc. This is followed by a display of biological standardisation of drugs and of the discovery of penicillin. Then come the sections of curative medicine and surgery and the modern specialties of Thoracic Surgery, Orthopædics, Plastic Surgery and Anæsthetics, and such instruments as the electro-encephalogram and electrocardiogram can be seen. Besides the electrocardiogram a life-like record plays thumping out the heart sounds. The exhibition has not been afraid to teach a few lessons and in the plastic surgery section there are models illustrating common household accidents that lead to disfiguring burns. The necessity of blood donors is also stressed.

In the Dome of Discovery there are display cases showing advances in the control of tropical diseases and in The Living World section great space is devoted to Darwin's theory of evolution, genetics and the developing fœtus.

The present theoretical basis behind so many and varied advances in all branches of science, including medicine, is the theme of the Science Exhibition at South Kensington. Here one can be pleasantly introduced to the complexities of the structure of matter. This show is indeed symbolic of the Atomic Age. The entrance to the exhibition is literally through the carbon atom, the illumination appears like a massive chain compound and the decorations are inspired by crystal structure. The first section demonstrates the evolution of the splitting of the atom and introduces without pain such terms as electrons, neutrons and isotopes. It progresses from matter to light waves and invisible waves, then via metals and alloys to carbon and life, to muscles at work, enzymes and the sulphonamides. The exhibition must give great hope to the materialists for it seems to show that really there is nothing in the world but neutrons and electrons. Volition and creative thought cannot be trapped under a show-case or pinned against a wall, but without them this spectacular exhibition would not even be there !

Across the road at the Victoria and Albert Museum the National Book League have organised an exhibition of books. Here Sir Henry Dale and Geoffrey Keynes have selected some representative medical books. There is William Harvey's " De Motu Cordis," Robert Boyle's "The Sceptical Chymist," Thomas Sydenham's " Tractatus de Podogra," Edward Jenner's " Enquiry into the Causes and Effects of the Variolæ Vaccinæ," Lister's " Antiseptic System," Manson's " Tropical Diseases " and Sherrington's " Integrative Action of the Nervous System."

Is it possible from these exhibitions to see into the future ? Is it possible to discern the fields that medicine will next conquer ? Could anyone have foreseen in 1851 our present great achievements in surgery and therapy ? Anæsthetics had been discovered but not bacteriology ; operations were still accompanied by dreadful mortality. Therapy was entirely empirical ; it was not until this century that specific treatment whether a replacement of a deficiency (*e.g.*, hormone or vitamin) or antibacterial drug was discovered. The late Professor John Ryle considered that the next advances, except those following on present lines of thought, would be in the field of Social Medicine. However, this is not a new specialty ; as is well known Moses laid down certain rules of public health. Social and preventive medicine still tend to be dismissed as just " drains," but perhaps the exhibitions at the London School of Hygiene and Tropical Medicine and at the Safety, Health and Welfare Museum will help to show that social medicine is over a hundred years old in this country and is still growing vigorously.

At the London School of Hygiene there is almost what can be described as the perfect exhibition. The diagrams are few and intelligible and the photographs and lithographs are large and tell their story without a mass of explanatory typescript, the exhibition is well and amusingly sign-posted so that the story develops easily, and there is no charge for admission ! The first section shows the development in the care of children from factory hands to school, from the overcrowded one-form schools to the modern primary and secondary schools. The section discusses housing and town planning and then follows a demonstration of the tracking down of the source of a typhoid epidemic and then after paying tribute to those two great G.P.s Mackenzie and Pickles, the exhibition clearly illustrates some of the recent social legislation including the National Health Service. Finally, there are a section devoted to tropical medicine and a small historical section with portraits and short biographical notes of those pioneers in public health, whose busts adorn the outside of the building. This exhibition presents what is so often considered a tedious subject in a clear, concise and stimulating manner. It shows how medicine has spread from the hospital, surgery and laboratory into the everyday life of everyone.

The spread into the factory and work-day can be seen at the Manpower, The Human Factor in Industry Exhibition at the Safety, Health and Welfare Museum. Unfortunately the presentation of this exhibition is not up to the standard of the others. There is no developing theme or continuity. Each exhibit stands by itself unrelated to those on either side. However, there is much to learn. Vocational guidance, industrial training and resettlement of the disabled sections are well illustrated. The latter section contains many photographs of limbless and blind persons performing the most astonishing occupations. Samples of high grade goods turned out by the employees of Remploy Ltd. (a public company set up to provide work under sheltered conditions for the disabled) are on show. The section of industrial health traces the development of the recognition of industrial diseases such as chrome ulceration and " phossy jaw," and also the general care of employees ; this overlaps with the prevention of accidents and there are dramatic photographs of scalped women who were working on vertical drills without guards. It is extraordinary that the medical profession who has spent so much time and research in obtaining satisfactory working conditions should so thoroughly ignore its own working hours and conditions.

The most conspicuous omission from this medical re-assessment is the field of psychiatry. The entire national outlook towards the mentally ill has changed in the last hundred years and this gradual change was given impetus during the last war. Nevertheless it is still quite respectable to suffer from " nerves " although the same person could not admit to an anxiety state. Furthermore it is comparatively recently that we have rediscovered that the ideal doctor will treat the whole patient and must therefor consider any psychological processes that will affect the outcome of the particular disease from which the patient is suffering. It is only 150 years ago that the York Retreat was opened as the first asylum that replaced restraint, fetters and abuse by kindness and tolerance. Such achievements are surely worth mentioning and indeed some suitable photographs could help to counter-balance such films at " The Snake Pit." Is the absence of psychiatry due to natural modesty or are the psychiatrists looking down disdainfully upon the immature specialties who have not yet outgrown the stage of exhibitionism ?

Exhibitions mentioned are :—

1. Prehistoric Man in Health and Sickness.
2. Medicine in 1850.
   Both at Wellcome Historical Medical Museum, 28, Portman Square, W.1. (Admission free.)
3. South Bank Exhibition. Admission 4*s*.
4. Science Exhibition, South Kensington. Admission 2*s*.
5. Exhibition of Books, Victoria and Albert Museum. Admission 1*s*.
6. Manpower. The Human Factor in Industry. Safety, Health and Welfare Museum, Horseferry Road, London, S.W.1. Admission free.
7. Public Health. London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1. Admission free.

Review

Prosthetic Dentistry. By F. WINSTON CRADDOCK. Henry Kimpton. *Price* 28*s*.

The enlarged second edition of this book now contains 360 pages. The refreshing physiological approach to the problems of prosthetic dentistry, such a noteworthy feature of the first edition, has been retained but the book can no longer be criticised as " sketchy."

All aspects of denture construction are adequately covered tor the undergraduate, but the qualified may find the treatment of partial dentures disappointingly short. Also in this section the recommended design of plastic base partial dentures, with a periphery close to the margin of the palatal gingivæ, can be criticised for the stagnation it favours around the necks of the natural teeth.

For a sound basis in the principles of denture construction this book can be highly recommended.

Guy's Hospital Reports

The latest edition of the Hospital Reports under the Editorship of Mr. R. C. Brock and Dr. W. N. Mann has just been published. It is a double number and contains 180 pages. The table of contents is given below. Readers are reminded that the annual subscription which is normally £2 2*s*. 0*d*. or 12*s*. 6*d*. a copy has recently been reduced to £1 1*s*. 0*d*. to Guy's men and 10*s*. 6*d*. to Guy's students.

CONTENTS

The Contribution from Guy's Hospital to Oto-laryngology
By PHILIP READING.

Patent Ductus Arteriosus with Reversed Shunt due to Pulmonary Hypertension
By MAURICE CAMPBELL and REGINALD HUDSON.

The Value of Clinical Laboratory Tests
III. Serum Protein Levels in Disease
By W. H. H. MERIVALE and D. R. C. WILLCOX.

Asthma : A Survey of 594 Patients
By R. KAUNTZE, T. H. SHIRE and N. SOUTHWELL.

A Preliminary Report on the Motor Activity of the Stomach after Thoraco-Lumbar Sympathectomy
By CHARLES NICHOLAS.

The Abortion Rate
By HUJOHN A. RIPMAN

A Simple Apparatus for the Continuous Quantitative Recording of the Respiration Rate during Anæsthesia
By J. H. BENSON, E. B. REEVE and G. W. TAYLOR.

A Note on the Progression of Non-diabetic Glycosuria to Diabetes Mellitus
By J. C. HOUSTON

Hæmatological Changes in Cases of Congenital Cyanotic Heart Disease which have been submitted to Operations designed to Improve the Circulation to the Lungs
By W. D. BRINTON.

Sport

GUY'S HOSPITAL GOLFING SOCIETY

The Beveridge Cup

Moor Park

30th May, 1951

Guy's won the Beveridge Cup this year at Moor Park. This year it is the 3 best medal scores over 36 holes in the Hospital.

I. Caldwell ..	78 and 73
M. H. H. Bishop ..	82 and 80
D. Gall	81 and 83
Total	477

2nd were Bart's. with 513.

I Caldwell won the London University Championship and M. H. H. Bishop won the Handicap prize.

Guy's *v*. London Hospital

At Maylands. Result—Lost—Guy's ½ London Hospital 7½

30th June, 1951

We were entertained extremely well at this very pleasant course, and we played an 8 a side singles match.

Guy's names first.

M. H. H. Bishop halved with G. Ransden

R. Park	lost to I. F. Smith	7 and 5
P. Rusden	lost to P. A. Watt	3 and 2
J. Irvin	lost to R. J. Mather	5 and 3
R. Hosden	lost to C. Brown	4 and 3
L. Brunt	lost to W. McCreath	7 and 6
G. Fisch	lost to L. Jones	4 and 2
J. Davies	lost to A. Percy	7 and 5

Guy's *v*. Middlesex

At Royal Blackheath Golf Club

Result—Won 3—1

13th June, 1951

4 Ball Matches. Middlesex names first.

Conen Rope	Lost to	P. Rusden R. Park	4 and 2
Flury Calver	Beat	L. Brunt J. Irvin	3 and 1
Lister Silver	Lost to	L. Balfour-Lyne J. Mepstead	2 and 1
Le Bouvier Beare	Lost to	M. Gill-Carey R. F. Ridley	3 and 2

Hospital Information, etc.

APPOINTMENT VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Registrar** in the **Department of Conservative Dental Surgery** with attendance on 6 sessions per week to commence duties in October, 1951.

Salary will be at the rate of £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **22nd August, 1951.**

PASS LIST

CONJOINT BOARD

First Examination

June, 1951

Anatomy

B. B. Collins
G. H. Daw
S. F. Evans
I. U. Fraser
M. C. Gie
J. McKenna
R. J. S. Milton
R. J. R. Moffatt
B. K. Oliver

Physiology

B. B. Collins
D. J. Davies
I. U. Fraser
J. McKenna
B. J. R. Moffatt
B. K. Oliver

Pharmacology

R. Y. Calne
J. Ernsting
R. C. Francis
M. N. Halamandres
S. C. C. Scott
I. R. Wiernik

UNIVERSITY OF OXFORD

Trinity Term, 1951

Medicine, Surgery and Midwifery

E. J. Elkington
M. C. Gill-Carey
W. D. May
J. E. K. Moore
P. V. Skinner

SOCIETY OF APOTHECARIES OF LONDON

Final Examination

June, 1951

Pathology, Bacteriology and Forensic Medicine

A. C. D. Abdool Raman
F. D'U. Burgess
G. H. Fisch
*N. M. Midgley

Medicine

G. H. Fisch
*N. M. Midgley

* Has completed the examination.

UNIVERSITY OF CAMBRIDGE

M.B.

Final Examination (Old Regulations)

Easter Term, 1951

Part II.—Principles and Practice of Physic, Pathology and Pharmacology

*W. G. Davies
*A. S. Harris
*V. J. Marmery

Final Examination (New Regulations)

Part I.—Pathology and Pharmacology

N. Gee
J. A. McHardy
J. A. J. Smith

Final Examination (Old Regulations)

Part I.—Surgery, Midwifery and Gynæcology

J. A. D. Briggs
G. B. Davison
A. Fairley
H. W. S. Francis
P. S. Greaves

Final Examination (New Regulations)

Part II.—(2) Principles and Practice of Physic, (3) Surgery, (4) Midwifery and Gynæcology

W. V. Agnew (4)
J. H. Kerr (2, 3, 4)
D. B. Murray (3)
J. O. Ojukwu (2, 4)
D. N. H. Owen (2, 4)
*G. A. Taylor (2, 3, 4)

* Has completed the examination.

UNIVERSITY OF LONDON READERSHIP

Dr. W. H. H. Merivale has been appointed to the University Readership in Clinical Pathology tenable at Guy's Hospital Medical School from October 1st.

SOCIETY OF APOTHECARIES OF LONDON

LIVERY

The following have been elected to the Livery :—

O. B. Brears
W. Gordon Sears

PAPERS BY GUY'S MEN

Brock, R. C. Discussion on the Role of Sinusitis in Brochiectasis. (Royal Society of Medicine, Section of Laryngology.) *J. Laryng.*, 1951, **65,** 449.

Clarkson, Patrick. Les Corrections des Deformations de la Maxillaire. *Proc. Congrés Médical Centenaire, Brussels, June,* 1951.

Collier, H. Neil. Hypertension and Life Assurance. *Practitioner,* 1951, **166,** 577.

Cutler, Robert. Laboratory Motorisation. *Brit. dent. J.*, 1951, **90,** 318.

Fenn, H. B. Everyday Procedures in Dentistry. Impression Taking for Full Dentures—Sodium Alginate. *Brit. dent. J.*, 1951, **90,** 316.

Grewcock, Ronald J. G. A Short Survey of the Principles Involved in the Establishment of Balanced Occlusion. *Dent. Practit.*, 1951, 1 (No. 8).

Piercey, J. E. The Diagnosis of Thyroid Swellings. *Clin. J.*, 1951, **80,** 141.

Warren, M.D. Poliomyelitis and Polioencephalitis with Opsoclonia following Appendicectomy. *Lancet,* 1951, i, 213.

Warren, M.D. Medical Education in the Eighteenth Century. *Postgrad. med. J.*, 1951, **27,** 304.

Wayte, A. B. Treatment of Some Disorders of the Pituitary by Radiotherapy. *Proc. R. Soc. Med.*, 1951, **44,** 450.

CHANGES OF ADDRESS

Charles M. Ockwell, M.D., F.R.C.S., "The Coppice," Pilgrim's Way, Kemsing, Kent. Tel.: Otford 613.

T. N. Reynolds, M.B., B.S., 36, George Road, New Oscott, Sutton Coldfield. Tel.: Sutton Coldfield 5035.

L. F. W. Salmon, M.B.E., M.S., 10, The Downs, Wimbledon, London, S.W.20, and Keats' House, Guy's Hospital, London, S.E.1. Tels.: Wimbledon 7503 and Hop 0151.

I. Yentis, M.D., 91, Lauderdale Mansions, London, W.9. Tel.: Cunningham 5487.

BIRTHS

LEWIS.—On June 21st, 1951, at Nuffield House, Guy's Hospital, to Bunty (née Moore), wife of T. L. T. Lewis, F.R.C.S., M.R.C.O.G.—a son (Robert David), a Brother for John and Anthony.

OGSTON.—On June 30th, 1951, at Stoneycrest Nursing Home, Hindhead, to Pauline, wife of Robin Ogston, L.D.S., R.C.S.—a daughter (Elspeth Logan).

REYNOLDS.—On June 21st, 1951, at the Dingle Nursing Home, Birmingham, to Peggy, wife of T. N. Reynolds, M.B., B.S.—a daughter (Michele Diane).

STONE.—On June 19th, 1951, at Greengates, Mildmay Road, Chelmsford, Essex, to Elizabeth (née Simpson), wife of Patrick Stone, M.R.C.S., L.R.C.P.—a son.

EDS. R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1644 28*th July* 1951 *Ninepence*

PASSIM

IN that number of the *Gazette* published on 10th March, 1951, Mr. Murray Falconer, Director of the then recently founded Guy's-Maudsley Neurosurgical Unit, gave a revealing survey of his own particular subject. Since that time his department in the Hospital has become surely established and it now exists, not as an isolated entity, but as an essential part of Guy's general clinical resources. Yet, we regret to relate, this state of affairs is not to last for long. By May, 1952, so we are led to believe, the whole unit will have been uprooted and transferred to Denmark Hill. This course of action represents no hasty decision. Instead it is one of " high policy," decided upon only after due enquiry and thorough deliberation. The question at this stage, therefore, may well be of academic interest rather than of practical importance.

So far as undergraduate medical training is concerned neurosurgery is looked upon almost as a quintessence of specialisation. In the Goodenough Report, apparently, it failed even to gain a mention. Most of us have tacitly accepted this view. Only since attending the demonstrations which Mr. Falconer himself has staged in the Hospital and, what is more, seeing the cases which have come into his beds, have we realised what a wealth of so-called " valuable teaching material " has previously been denied to the clinically impecunious student. We are referring not so much to examples of unique pathological interest but to problems in which besetting symptoms like headache, backache, giddiness—all encountered frequently in everyday practice—have a special and morbid significance. The serious conditions thus betokened are nevertheless amenable to radical treatment in a number of instances, given accurate, thorough and early diagnosis.

The three months' neurological appointment for medical ward clerks itself affords special opportunities and exacting training in both clinical methods and diagnostic deduction. Even this, far too many students decide to forego. The neurosurgical unit offers still further scope along very similar lines. What is more, there is the added attraction for a number of undergraduates that radical and effective curative measures can frequently be exhibited as well. So far, students have had little chance to follow the workings of this latest unit. Very soon, even access to it will be virtually out of reach—at Denmark Hill.

In addition the question of clinical expediency must be taken into account. Admittedly, until the beginning of 1951, cases requiring neurosurgical intervention did find their way into the wards at Guy's from time to time and means were found for adequately dealing with them. Granted, too, that the majority of teaching hospitals in London have seen fit to locate their neurosurgical centres out in the suburbs. Nevertheless, it is surely easier for general practitioners faced with possible neurosurgical emergencies to send them to one general hospital immediately, instead of deciding beforehand which of two possible destinations should be chosen. And once a patient is in hospital in an acute condition is there any doubt that it is simpler to bring various experts together in consultation than to transport the patient, first in one direction and then in another ?

Such is the situation with which we are faced. After May, 1952, subarachnoid hæmorrhages will inevitably arrive at Guy's and that very difficult question of exactly what investigation and treatment should be instituted and, above all, the timing of such measures, will have to be settled—all the while with the idea in mind that a dangerously ill patient may at any moment have to undertake a further adventurous journey, on this occasion from London Bridge to Denmark Hill. In addition, as the unit gains in reputation, numerous cases will reach it direct and never be seen by students at Guy's. For the time being, we agree, Mr. Falconer is working with unusual burdens under the improvised circumstances in Nuffield House and York Clinic. Consequently full advantage is not being taken of his department in either pre-qualification or post-graduate teaching. For him, the new building under construction at the Maudsley constitutes great hope for the future. To us, by contrast, the move in that direction is none other than a retrograde step for which, maybe, there will be some redress when at last a new Guy's arises in about half-a-century's time.

We offer our congratulations to Mr. G. T. Money on being awarded the University of London Sanderson-Wells (Junior) Prize for his essay on " The Role of Cobalt and Copper in Nutrition." It is hoped to publish the essay in the *Gazette* in the near future.

News from Japan

LIEUT. M. J. HUNTER, R.A.M.C., until recently " on the House " at Guy's is now in Tokyo. He writes, inter alia, that, " There are quite a few Guy's chaps here, the Hospital being a combined U.K. and Australian show. Alan Parks is one of the surgeons and Eric Gareh another (for whom I work), so that of the four surgical teams, two are Guy's concerns. Peter Poole is doing a sort of H.P. job here, Tony Missen is the pathologist and John Flood is doing an extremely good job as the psychiatrist to the Commonwealth troops both here and in Korea.

" Japan is an interesting country and, in parts, very beautiful. Although, of course, we got here too late for much of the blossom the azaleas have to be seen to be believed. The whole country seems to consist of very steep-sided hills and narrow, twisty valleys, all available ground being cultivated, mostly in terraces up the mountains.

" We live well in the mess with a surfeit of food of all sorts, except that there is no fresh milk or fruit allowed. The servant problem is dead easy. We have one Japanese girl between two officers and they do an immense amount of washing, press trousers before breakfast every day, tend to one's every wants—well, almost ! Even though they can hardly speak a word of English and I certainly can't speak Japanese. ' Washy-washy ' is usually the operative word.

" Life is cheap, 50 cigarettes free a week and 150 for 7*s.* 6*d.*, gin 6*d.*, whisky 4*d.*, bottle of Gordon's 17 under-proof for 8*s.* 6*d.* Meat is unlimited, china and silk goods are exquisite. Everything the Japs do for us is free and paid by reparations, although I think that will all stop when they sign the treaty.

" News from home is quite good. The Japs produce a daily paper in English for us which gives most of the relevant news and we get the English Sunday papers and the air mail edition of the ' Times ' about nine days after you, which isn't really bad. The British Commonwealth Occupational Forces' radio relays news from London and sometimes recordings from B.B.C. shows, which reminds us we are really not so far from home."

So life in the Orient *is* tolerable, after all.

The Pulmonary Circulation

By H. E. HOLLING, V.R.D., M.Sc., M.B., M.R.C.P.,
Medical Research Council Unit, Guy's Hospital.

MUCH of our present knowledge of the pulmonary circulation has been gained by the use of the cardiac catheter. It is interesting, therefore, to recall that Forsmann in 1928 thought out the procedure as a means of introducing stimulants into a failing heart without puncturing the heart wall. To show how harmless the method was Forsmann decided to submit himself to catheterisation. At the first attempt a colleague passed a catheter for about 35 cm. into Forsmann's arm vein but refused to continue because he believed that the procedure was too dangerous. In spite of opposition Forsmann continued his experiments and a week later he cut down on his own antecubital vein and inserted a catheter into it. X-ray screening was necessary to guide the catheter into the right atrium and he had a nurse hold a mirror in front of an X-ray screen so he could stand behind it and see that the catheter really did go into his heart. By these means he was the first man to pass a catheter into the heart and probably the only man ever to do it on himself.

Dr. Forsmann's pioneer work was overlooked for the next ten years until Cournand in America and McMichael in this country saw the possibilities of the technique as a method of investigating cardiac disease. Thanks to Dr. Forsmann's persistance and bravery we are now able to investigate the pulmonary circulation without opening the chest.

ANATOMY

It is often thought that the pulmonary circulation differs from the systemic only in that the pressures within it are lower and that it has the peculiarity of having venous blood in its arteries and arterial blood in its veins. But it has been known for many years that the two circulations differ in many other important ways, and to make this clear some of the simpler facts about the pulmonary circulation should be remembered.

Though the same blood flow passes through both pulmonary artery and aorta the pulmonary artery is about 20% wider than the aorta, its wall is thinner and the elastic tissue in it more thinly spread. The fibrous adventitia of the pulmonary artery appears as a loose coat in comparison to the compact covering of the aorta. The smaller pulmonary arteries and arterioles are also thin-walled and because of the thinness of their muscular coat are readily distinguishable from similar arteries in the systemic system. A systemic artery of 0.1 mm. diameter has a well developed muscular layer which in section takes up 30 to 40% of the diameter, whereas in the equivalent pulmonary arteriole the wall takes up only 10% of the diameter. Even when hypertension of the pulmonary system occurs there is said to be no medial hypertrophy of these arterioles, as in the systemic system.

A branch of the pulmonary artery is distributed alongside each of the subdivisions of the bronchi eventually to form a capillary network around the smallest bronchioles and the pulmonary alveoli. In this capillary network the blood is spread out into a very thin sheet in close contact on each side with the air in the alveoli. Being separated from the alveolar air spaces by only a single layer of cells the pulmonary capillaries are less supported than the systemic capillaries and if the pressure within them is so increased that the walls rupture, blood readily bursts into the alveoli.

Blood from the pulmonary capillaries flows into the lobular veins and thence into the pulmonary veins. The four pulmonary veins are short and because they lie behind the heart they are not seen in the usual X-ray film of the chest or even at post-mortem examination. They are, in fact, structures which are often forgotten when considering the pulmonary circulation. It is remarkable that the pulmonary veins are smaller in cross section than the pulmonary artery, the total circumference of the pulmonary veins being only about 80%

of that of the pulmonary artery. They are relatively thick-walled and prolongations of the muscular bundles of the left atrium extend along them. Since the pulmonary veins are less capacious than their corresponding arteries the blood must pass through them at a greater velocity; the muscularity of their walls further suggests that they are less likely than the arteries to be distended by an increase of pressure within them.

Through the pulmonary veins passes not only blood from the pulmonary artery but also some blood from the bronchial arteries. The bronchial arteries are the nutrient vessels to the lung tissues. They arise fron the upper intercostal arteries or directly from the aorta and blood from them drains into the azygos veins and superior vena cava. There is free anastomosis between the pulmonary and bronchial systems by the capillaries surrounding the smaller bronchioles, so that some blood from the bronchial system drains into the pulmonary veins. Normally there is no direct anastomosis between the pulmonary artery and the bronchial artery but if a branch of the pulmonary artery is blocked the circulation to the embolised area may be taken over by its bronchial artery. In some cases of congenital pulmonary stenosis or atresia the bronchial arteries may take over the respiratory function of the pulmonary artery entirely.

PULMONARY PRESSURES

The appearance of the pulmonary artery suggests that the pressure within it is less than the pressure in the systemic circulation and many years ago this was shown to be so in experimental animals. Brock, R. C., and Spurrell, W. R., in 1939, measured the mean pulmonary artery pressure in man during a course of a thoracic operation (*Guy's Hospital Reports*, 1939, **89,** 262). They found the mean pressure to be between 20 and 30 mm. Hg. Modern manometers used with a cardiac catheter show a systolic pressure of about 25 mm. Hg. and a diastolic pressure of 8 to 10 mm. Hg. With such manometers tracings of the pulse pressure in the heart and pulmonary vessels can be obtained. Unfortunately these tracings are often complicated by artefacts.

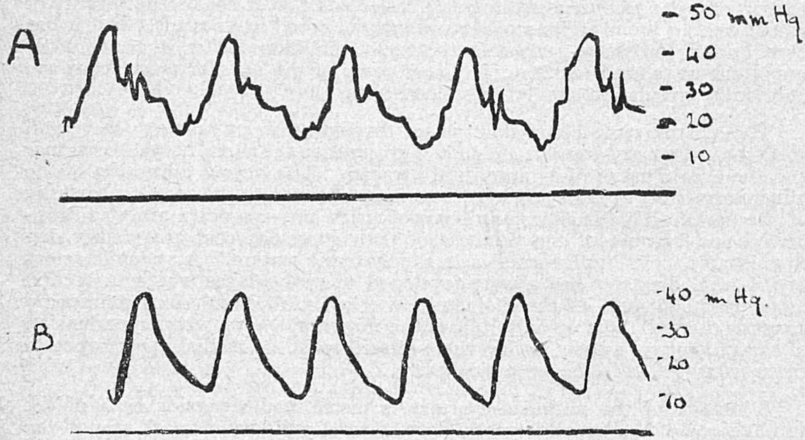


Fig. 1. Pulmonary Artery Tracings obtained at:
(*a*) Catheterisation. (*b*) Operation.

These are due to the catheter being knocked by the beating of the heart, with the result that vibrations are set up and transmitted along the catheter appearing on the record as pressure waves. Pulse tracings taken at operation directly from the pulmonary artery do not show these vibrations. Fig. 1 shows pressure records obtained from the pulmonary artery at catheterisation and at operation by putting a small needle directly into the pulmonary artery. Comparison of the two shows how heart movements can distort the pressure pulse record obtained at catheterisation. These artefacts may make pulmonary artery and capillary pulse tracing particularly difficult to interpret.

It is also possible to measure the pressure in the small lung vessels. This is done by pushing the catheter as far as it will go until it jams and obstructs the vessel in which it lies. Blood withdrawn through the catheter in this position is found to be bright red, having been withdrawn from the alveolar capillaries, and pressure recorded at this point is much lower than the pulmonary artery pressure and is usually termed the pulmonary capillary pressure. This pressure, however, is more probably the pulmonary venous pressure recorded by retrograde transmission through the capillary bed; it varies slightly with the phase of respiration around a mean of 10 mm. Hg. Pressure in the pulmonary veins has been measured in cases of arterial septal defect and at operation. The pressure gradient from pulmonary capillary to pulmonary vein or left atrium has been shown to be small; about 4 mm. Hg.

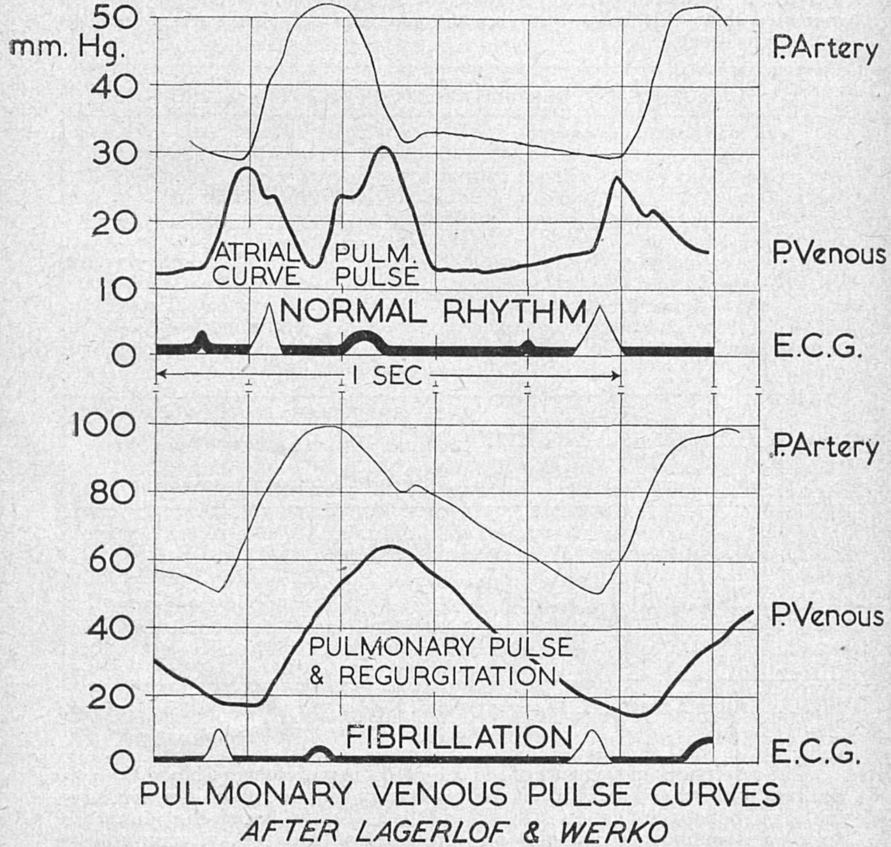


Fig. 2. *Scand. J. Clin.* and *Lab. Invest. I.*, 147, 1949.

Fig. 2 shows in schematic form the pressure record obtained when the catheter tip obstructs the pulmonary vessel in which it is lying and records the pulmonary venous pressure, the so-called "pulmonary capillary curve." Normally two pressure waves (upper tracing) occur for each heart beat. The first of these is that of the left atrial contraction which is transmitted backwards through the pulmonary veins. The second is the pulse from the pulmonary artery which has passed through the smaller pulmonary vessels and been reflected back into the catheter. As is shown in the lower tracing in Fig. 2, the first pulse wave due to atrial contraction disappears when the auricles fibrillate. This record shows in addition the effect of mitral regurgitation, when the pulse wave from the pulmonary artery and the regurgitant pulse wave through the mitral valve meet and summate in the smaller lung vessels,

RESISTANCE OF PULMONARY CIRCUIT

The resistance of the pulmonary circuit is low in a normal circulation and the capacity of the pulmonary blood vessels for dilatation is remarkable. It has been estimated (Roughton, *Amer. J. Physiol.*, 1945, **143**, 621) that the increase in cross section of the pulmonary artery to pulmonary capillary bed is from 6 to 38,000 sq. cm. During exercise the blood flow through the pulmonary circuit may be increased four fold and yet the capacity of the pulmonary vessels is such that there is no rise in pulmonary artery pressure. When an atrial or ventricular septal defect, or a patent ductus arteriosus, exists, a stream of blood passes from the left to the right side of the heart and the pulmonary blood flow may be increased to 19 litres per minute without an increase in pulmonary artery pressure. The pulmonary blood flow may be increased above this figure, but if so, an increase in pulmonary artery pressure is likely to occur.

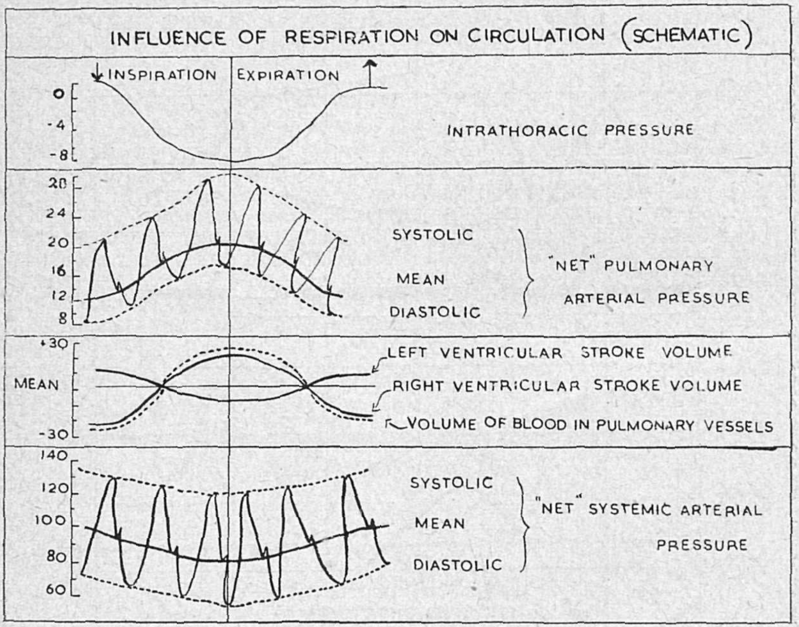


Fig. 3. After Lansen, H. D., Bloomfield, R. A., and Cournand, A. *Amer. J. Med. I.*, 315, 1946.

The respiratory movements of the chest aid the movement of blood through the lung vessels. The effect of the respiratory movements on the pressures in the pulmonary circulation is shown in Fig. 3. In inspiration the pulmonary artery and pulmonary capillary pressure increase and the systemic arterial pressure decreases. The reverse takes place during expiration. The intra pleural pressure in inspiration decreases more than does the right atrial pressure so that the effective filling pressure of the right heart is increased and the output of the right heart increases. The reverse effects take place in expiration. In effect, during inspiration blood is sucked into the thorax and blood is expelled during expiration. The increased respiratory movements which accompany exercise augment the flow of blood through the lungs.

VASOMOTOR INFLUENCES

There is no doubt that the pulmonary vessels are supplied with autonomic nerves but it is still not decided whether the pulmonary circulation acts entirely in a passive manner or whether the autonomic nerves affect the blood vessels and regulate the flow of blood through them. The evidence from animal experiments is not decisive. Those who believe that the pulmonary vessels are passive conveyors of blood to the alveoli and that the vasomotor nerves play no part in the regulation of blood through them, point out that they are so deficient in muscular tissue that it is unlikely that any independent conability they may have could present much resistance.

Normal pulmonary vessels do, however, appear to have the power of contraction, because, if a normal person breathes 10% oxygen, it is found that his pulmonary artery pressure rises. The vascular resistance of the pulmonary vessels must have increased because, though some increase in pulmonary blood flow does occur, it is insufficient to have caused the rise of pressure, which therefore must be the result of vasoconstriction.

The effects of various drugs—for instance, sympatheticomimetic drugs, and drugs causing autonomic paralysis—on the pulmonary circulation have been studied in the hope that they might indicate the actions of the pulmonary autonomic nerves. However, it is difficult to be certain whether an observed change in the pulmonary circulation is due to a primary action of the drug on the pulmonary circulation, or a secondary action resulting from the changes caused in the systemic circulation. Thus methedrine, which usually constricts vessels innervated by the sympathetic nervous system, causes a rise in the pulmonary artery pressure which may not be due to pulmonary vasoconstriction but to changes in the systemic circulation. Tetra-ethyl ammonium chloride inhibits autonomic vasoconstrictor tone in systemic vessels. Fowler, N.O., et al., (*J. Clin. Invest.*, 1950, **29**, 1387), found that if the pulmonary artery pressure was normal this drug had no effect on the vascular resistance of the pulmonary vessels, but when pulmonary hypertension was present it caused a fall in pulmonary artery pressure in 11 of 15 patients. A possible interpretation of these findings is that the autonomic nervous system plays no part in the maintenance of normal pulmonary artery pressure, but may play some part in its elevation in diseased states.

PULMONARY CONGESTION

The function of the lungs becomes disturbed when they are congested with blood. Not only is the function of oxygenating the blood impaired but their elasticity is diminished so that respiratory movements are carried out with greater difficulty. One result of this is a decrease in the vital capacity, and this fact has provided a convenient though inaccurate method of assessing the degree of congestion of the lungs.

The volume of blood in the lungs is not a constant quantity for, as we have seen, the amount of blood in the lungs varies with the phase of respiration. It has been suggested that the lungs act as a reservoir for blood in a similar manner to that in which the spleen of certain animals acts. Evidence in favour of this is the increase in vital capacity which is found after a large hæmorrhage indicating that the blood volume, less as a result of the hæmorrhage, has been redistributed so that a smaller fraction of it is contained within the lungs. The lungs are also affected by the redistribution of blood which occurs when a patient moves from the upright to the lying position. On lying down a decrease in vital capacity takes place. This is due in part to the hampering of chest movements by contact with the couch, and to an upward movement of the liver, but it is also thought to be caused by an increase in the volume of blood accommodated in the lungs.

When obstruction takes place in the pulmonary circulation, either because of failure of the left ventricle or because of mitral stenosis, the lungs become congested. A year or so ago it was thought easy to understand what was happening in the pulmonary circulation in these conditions. Behind the stenosed valve or failing ventricle the blood was dammed up and the increased pressure was transmitted through the pulmonary circuit causing increased pressure there. Such pulmonary hypertension as occurred, therefore, was thought to be the direct mechanical result of back pressure behind the valve lesion. We have found, however, that the pressure in the pulmonary artery in some cases of mitral stenosis may be as high as that in the systemic circulation, and it is unlikely that the pulmonary capillaries could withstand such a pressure without rupturing, or without development of pulmonary œdema. Our measurements of the pressure in the pulmonary capillaries and pulmonary artery have shown that when the pressure in the pulmonary artery is greatly increased the pressure in the pulmonary capillaries is not increased to the same degree. In Fig. 4 the relationship between the pulmonary artery pressure and the pulmonary capillary pressure is shown. The figures given here are obtained from three sources ; (1) our own results, (2) those of Dexter in Boston (*J. Clin. Invest.*, 1950, **29,** 602), and (3) Bing at the Johns Hopkins (Calazel et al. *Bull. J. Hopk. Hosp.*, 1951, **88,** 20). When the pulmonary artery pressure is between 10 and 30 mm. Hg. the pulmonary capillary pressure is roughly two-thirds of its value. When the pulmonary artery pressure rises above 30 mm. Hg. the difference between the two pressures increases. In fact in the resting state, in which these pressures were obtained, it is unusual to find a pulmonary capillary pressure much above 30 mm. Hg. though the pulmonary artery pressure may be very greatly increased. It is not possible to fit such findings into the proposition that the increased pulmonary artery pressure in pulmonary congestion simply represents the back pressure behind the obstruction. What they show is that, in some manner still not understood, pulmonary congestion stimulates the right ventricle to unnecessary work.

It is significant that the hydrostatic pressure in the pulmonary capillaries seldom rises above 30 mm. Hg. because this equals the colloid osmotic pressure of the blood and is therefore the pressure at which passage of fluid through the vessel wall may be expected. The relationship between the colloid osmotic pressure of the blood and the hydrostatic pressure within the lung capillaries is important in the mechanism of pulmonary œdema formation. In the systemic capillary the hydrostatic pressure may be higher (40 mm. Hg.) than the colloid osmotic pressure of the blood proteins (30 mm. Hg.) so that fluid may filter through the capillary wall at the arterial end of a capillary. In the pulmonary capillary the hydrostatic pressure is normally only about one-third of the colloid osmotic pressure of the proteins and filtration of fluid does not take place unless the pulmonary capillary pressure is increased to about three times its normal level.

Our finding in cases of pulmonary congestion at rest that the pulmonary capillary pressure seldom is increased above 30 mm. Hg., no matter how high the pulmonary artery pressure, suggests that the pulmonary arterioles constrict to protect the pulmonary capillaries from an excessive rise in pressure. We have further found in cases of mitral stenosis, that anxiety at catheterisation or bouts of light exercise may be associated with an increase in the pulmonary capillary pressure considerably above 30 mm. Hg. Thus the protection afforded by vasoconstriction in resting states fails when the patient is excited, or takes exercise ; for the rapid rise in pulmonary artery pressure at such times is transmitted to the pulmonary capillaries. These cases, therefore, are in danger of developing pulmonary œdema under the stress of emotion or exercise and sometimes do so. After a successful operation on the mitral valve the pulmonary hypertension is greatly reduced and the pressure is less affected by exercise.

In Fig. 4 it may be seen that the pressure measured in a case of transposition of the great vessels differs from the others because a high pulmonary artery pressure is associated with a normal pulmonary capillary pressure. These findings explain why such cases seldom suffer from pulmonary congestion. The low pulmonary capillary pressure indicates that the constriction of the pulmonary arterioles offer a resistance to the high pulmonary artery pressure of the same order as that of the systemic arterioles. It is remarkable that such strong vasoconstriction is said to occur without hypertrophy of the muscular walls of these vessels. It must be remembered that the increase in pulmonary artery pressure in this condition is not associated with pulmonary congestion ; but the pulmonary hypertension occurs because the full stream of the blood ejected from the left ventricle is being forced into the pulmonary artery.

In pulmonary congestion the pulmonary arteries readily distend. The engorged vessels seen in the X-ray of the chest and referred to as " hilar vessels " are pulmonary arteries for the pulmonary veins lie at a lower level and are behind the shadow of the heart. Whether the pulmonary veins also distend is not known, but might be ascertained by post-mortem studies. Anatomical studies, mentioned above, indicate that the pulmonary veins are less likely to distend than the corresponding arteries. That the pulmonary venous system is less distensible than the systemic venous system is shown in cases of atrial septal defect in which it is the right rather than the left atrium which dilates. Also Hamilton, W. F., (*Proc. Amer. Adv. Sci.*, 1940, AC, 324), has obtained pulse tracings from pulmonary veins which show that the pulmonary venous system, unlike the systemic venous system, is less distensible than its corresponding arterial system.

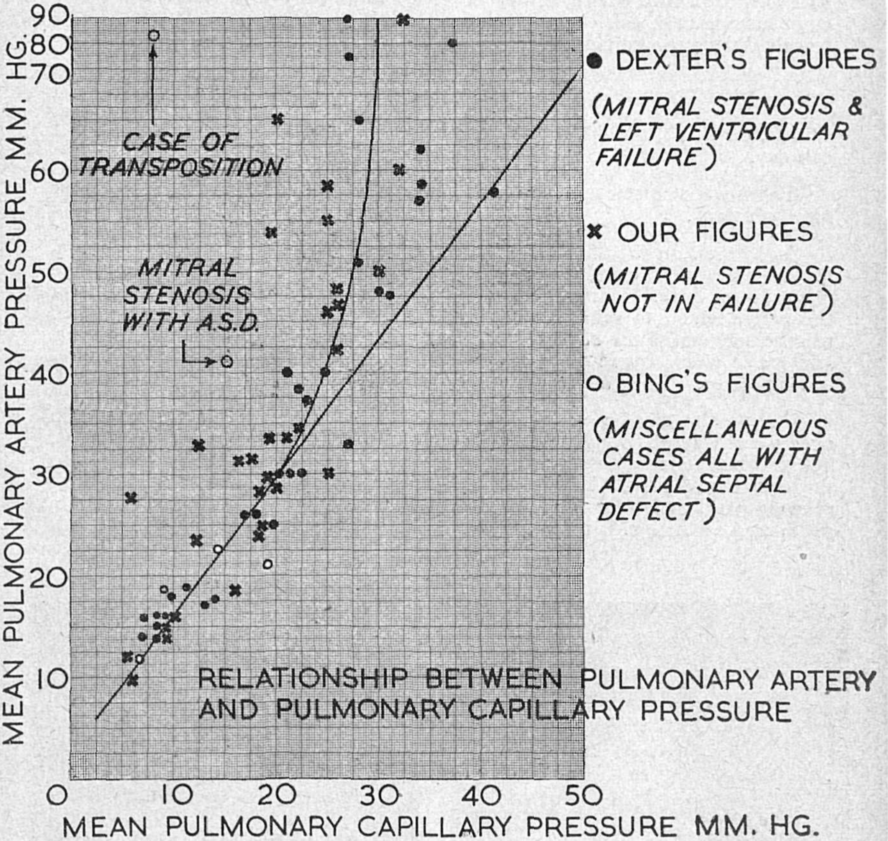


Fig. 4. The relation between Pulmonary Artery and Capillary Pressure in Pulmonary Hypertension.

CONCLUSION

This brief and condensed account of the pulmonary circulation is sufficient to show how our approach to the problem of cardiopulmonary disorders has been reorientated by the ability to estimate the blood flow through the lungs and to make measurements of the pressure within the pulmonary vessels. The knowledge already gained is changing our conception of their pathology and influencing our management of them, though there is still much to be learnt. It is very encouraging to learn that pulmonary hypertension is reversible, whether in mitral stenosis by mitral valvulotomy or in chronic pulmonary disease by effective treatment of the bronchitis, bronchospasm and cardiac failure.

Spontaneous Hæmopneumothorax

By MELVIN LEWIS, M.B., B.S.

WHILE not utterly rare, it was thought that a case of Spontaneous Hæmopneumothorax treated successfully by aspiration might be sufficiently uncommon to be worth recording.

The incidence has been fully worked out by Jones and Gilbert (1936), and Davidson and Keith Simpson (1940) have proved conclusively that a large hæmothorax can occur from the tearing of adhesions containing blood vessels during the collapse of the lung from a spontaneous pneumothorax.

CASE REPORT

Mr. A. E. C., age 44, a photographer, complained of pain in his back for one day.

There were no relevant points in his previous diseases (no tuberculosis) or family history.

At 10 a.m. on the 25th October, 1950, while walking up a flight of stairs, he was seized with a sudden onset of a moderately severe pain in the mid-line in the lower back. Until this time he had been quite well. 30 minutes later the pain seemed to radiate upwards between the shoulder blades and then transversely across the back of his chest. The pain was continuous in nature, and made worse by movement and coughing. There seemed to be no relieving factor. The pain lasted all day, and at 7 p.m. the patient went to bed.

During the day he experienced 4 attacks of severe "cramp-like" pain over the whole of the left side of his back and across the front of his chest. These attacks lasted five minutes, eventually dying down to leave him with the continuous pain. There was no associated nausea or vomiting and no referred pain. Also for the first time, on that day the patient noticed a cough, producing a white phlegm.

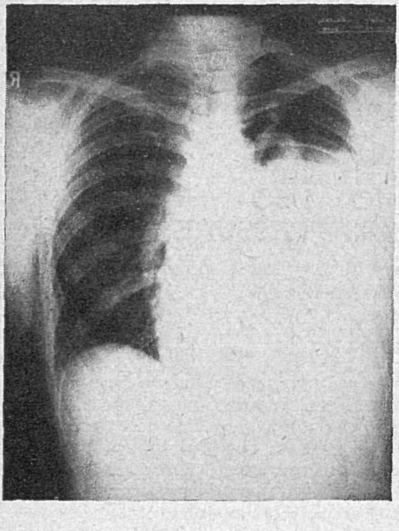


Plate 1. Left Hæmopneumothorax. Fluid level at 3rd costal cartilage. Considerable deflation of left lung.

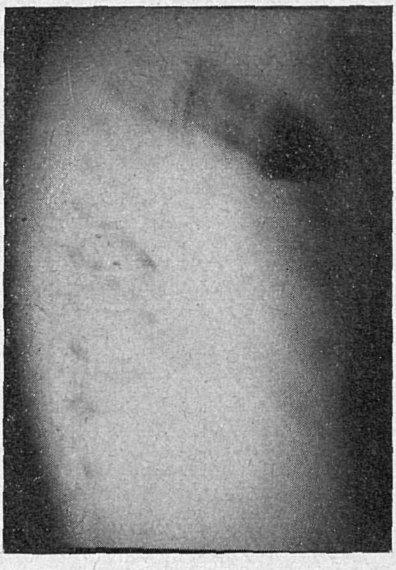


Plate 2. Left lateral.

His doctor gave him morphia gr. $\frac{1}{4}$ (16 mgm.) and he was admitted to Lambeth Hospital soon after midnight.

On examination he was seen to lie still, semi-propped up ; any attempt to sit upright caused a pain in his chest. There was some dyspnœa on mild exertion. The patient looked pale and ill. His lips were cyanosed. The mucous membranes had a good colour.

The blood pressure was $\frac{125}{80}$ mm. of Hg. and the pulse rate 88. The pulse had a good volume, and was regular. The apex beat was palpable in the 5th space $3\frac{1}{2}$ inches (9 cm.) from the mid-line. The heart sounds were very soft being heard more easily on the right side.

The chest showed very slight flattening on the right side. (The patient is right handed). The trachea was central. Movement was found to be diminished and the percussion note impaired at the left base. The left upper zone was hyper-resonant. The breath sounds were diminished on the left side ; no bruits were heard.

The only finding in the abdomen was the fact that pressure in the epigastrium caused pain in the back.

His temperature on admission was 99.2. The patient was put on an hourly pulse-temperature chart. During the small hours of the morning the pulse rose to 110 but settled to 88 later in the morning (10 a.m.). He was given morphia gr. $\frac{1}{4}$ (16 mgm.) to relieve his pain.

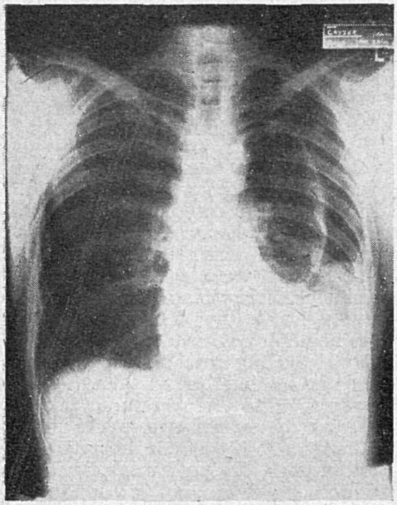


Plate 3. Soon after aspiration. Only a trace of fluid in the pleural cavity. Still shows left pneumothorax.

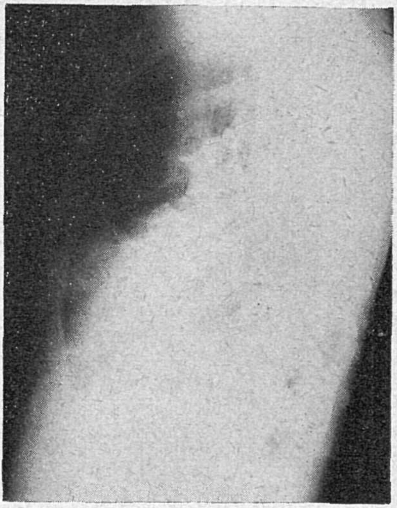


Plate 4. Left lateral.

Diagnosis

Later that day (26.10.50) he still looked pale and felt weak (at this time his hæmoglobin was 100% and his B.P. $\frac{125}{80}$ mm. of Hg.).

An X-ray of his chest was taken (see Plates 1 and 2). It thus became clear that he had an effusion and a pneumothorax ; a diagnostic pleural tap (17.10.50) revealed almost pure blood. The diagnosis of spontaneous pneumothorax with added hæmorrhage was then made.

Other investigations included the following :—

Blood W.R. and Kahn : negative.
Bleeding time : 1½ minutes.
Clotting time : 3 minutes.
B.S.R. : 36 mm. in one hour (9.11.50).
E.C.G. : normal.
Sputum : No tubercle bacilli seen.
Pleural Fluid : very many red blood cells, some lymphocytes and polymorphs, a few endotherlioids. No tubercle bacilli seen.

TREATMENT

10 a.m. next morning (28.10.50), i.e. 72 hours after the onset of his pain, the fluid was aspirated. 55 ounces (1,568 cc.) of heavily blood-stained fluid were removed. The patient stated he felt more comfortable after the aspiration. He still looked as pale as he did 24 hours after admission, but not so ill-looking and cyanosed as he did when first seen. There was now but slight impairment of the percussion note at the left base.

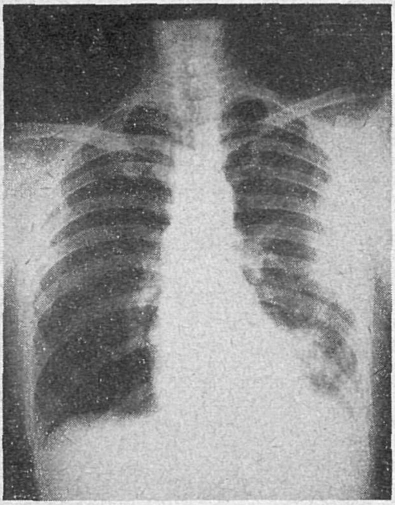


Plate 5. 48 hours after aspiration. Considerable re-expansion of lung (only a shallow pneumothorax). Densities in left lower zone probably blood clot. Peripheral densities in left mid zone consistent with thickened pleura.

A further X-ray of his chest was taken *immediately* after the aspiration (see plates 3 and 4).

48 hours after the aspiration yet another X-ray of chest was taken showing the almost complete re-expansion of lung (plate 5).

COURSE

One week after aspiration the patient felt incomparably better. He no longer complained of pain, and colour had returned to his cheeks. At this time the chest movements were equal and good, although there was still some residual dullness at the left base. The hæmoglobin, which had fallen to 68%, steadily rose on a course of ferrous sulphate gr. v. t·d·s. (0·9G. daily). The temperature finally settled to normal two weeks after admission. He was in hospital for one month, during the last week of which he was having breathing exercises. Apart from occasional slight pain just lateral to the præcordium he was feeling quite well.

COMMENT

That aspiration is a suitable method of treating spontaneous hæmopneumothorax is shown by the successful outcome of cases described by Maxwell and others (Maxwell, 1938). The problem of treatment resolved itself into two decisions, viz : the time to start and the moment to stop aspiration.

Aspiration was performed when it was judged that bleeding had ceased for at least 48 hours and the patient's general condition was improved. It would appear that the initial blood loss was rapid and the most severe, while some bleeding was still occurring 12 hours after the onset when the pulse rate had risen to 110. However, 24 hours after the onset the pulse rate had settled to 88 and the blood pressure to $\frac{130}{80}$ mm. of Hg. and aspiration was undertaken 48 hours from that time.

The aspiration was moderately vigorous, with almost complete removal of fluid blood. Since the patient felt so much better, and the lung had re-expanded so well in so short a time it was considered best to leave well alone. Indeed it was thought that the general pleural thickening due to fibrinous deposit might prove a natural prophylaxis against a further occurrence of spontaneous pneumothorax.

An interesting feature of the case was the remarkably rapid re-expansion of the lung.

I wish to express my sincere thanks to Mr Siddons, Dr. Wheaton and Dr. Waterlow, Dr. Hewlett, Dr. Peckar and Dr. Weber, and students of the X-ray unit at Lambeth Hospital, for their kind advice and help thoughout and for permission to publish this case.

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Jones and Gilbert. *Amer. Rev. Tuberc.*, 1936, **33**, 165.

Maxwell. *Brit. med. J.*, 1938, i, 778.

Sports Writing—English Style

The following Trans-Atlantic commentary, we thought, might stimulate our contributors to even more colourful efforts :—

EVERY couple weeks we get a copy of *Guy's Hospital Gazette* and it's always good reading. Among its delights are reports on the doings of the Hospital athletic teams of which there are many.

What struck us, in recent reports of rugby football matches, is the utterly incomprehensibility of the language in which the reports are written. Presumably one who knows rugby intimately can make sense of it, but seems odd that it is so entirely without meaning to anyone else. For instance :

" In the second half the Hospital pack really got stuck in, and many good foot-rushes were seen, but not always cohesive."

Betcha we know what " second half " means but after that we ain't buying any. Or this :

" T. Smith, breaking through, was unfortunate to see his neatly-placed kick scrambled away to touch. Guy's were outhooked in the tight but in the loose were far superior."

That has us completely licked. And this is only a trifle clearer :

" The opposition (scored) the only try of the match, a fly kick up the field and slightly diagonal passed over the defence and our opponents won the race for the touchdown."

So they race for 'em in rugby. Why can't the English straighten out their sports reporting so that it has the clarity of our own for all comers. What could be plainer than this, for instance :

" Binks lofted to centre. Bunks tailed up and squirted for home after the catch but was nipped by Banks' perfect peg to the plate."

—from THE KALENDS OF THE WAVERLEY PRESS,
Baltimore, U.S.A.—March-April, 1951

Obituary

WILLIAM EDWARD TANNER

THE death of William Edward Tanner has brought a great sense of loss and profound grief not only to his professional colleagues, but to all who knew him. I doubt whether any man has commanded greater affection than he.

He was born in London in 1889, the son of John Prime Tanner, and educated at Roan School, Birkbeck College, the Royal College of Science, and Guy's Hospital. After qualifying in 1913 he was house surgeon to Sir Arbuthnot Lane, whose biographer he later became. After serving with the R.A.M.C. during the first world war, he returned to Guy's where he held the posts of surgical registrar and R.S.O. His appointment to the staff of the Prince of Wales's Hospital and the Evelina Hospital enabled him to increase his experience and perfect his operative skill, and he quickly built up a large consultant practice.

He was a past president of the Hunterian Society and of the Medical Society of London, in which he also held the offices of editor and orator. He was convinced of the importance of health education, and he was chairman of the executive committee of the Royal Institute of Public Health and Hygiene. Four years ago he had a serious illness, but he continued to work with the same enthusiasm as before, and only a few weeks ago he completed a full operation list at a Sussex hospital.

His career was a triumph of determination and ability over well-nigh crushing economic difficulties and a physical handicap. He followed the tradition of many great surgeons in starting his professional life with training in dentistry, thereafter turning to the broader interests of medicine. After serving in the first World War he returned to Guy's and early made his mark as surgical registrar and R.S.O. It was an inspiration to attend his ward rounds for already he had developed that grasp of essentials which made the problems of surgical diagnosis resolve before the lucidity of his arguments. He had the utmost contempt for the mush of differential diagnosis which so often passes for evidence of learning. This ability to make up his mind and to state unequivocally his view played a large part in making him a greatly sought-after consultant.

The fact that he just failed to achieve election to the staff of Guy's never embittered him, but strengthened his determination in spite of immense difficulties to make a success of consultant life. In a remarkably short space of time his fame as a master of his craft was established. The gnawing anxiety of financial insecurity faded as his consulting practice grew. Sheer merit was combined with complete moral integrity and a courteous and friendly manner. In the operating theatre he preserved an equanimity and politeness which were a source of amazement to onlookers. The only sign of worry which could be detected by those who knew him well was an exaggeration of his thanks to his assistant and nurses during the most anxious stage of an operation.

His sense of duty to his hospitals boths in London and the country, and his determination to provide a happy life for his growing family prevented him for many years from taking a holiday. Even in his latter phase he was seldom away from home for more than a fortnight and then did not escape the tyranny of the telephone.

A serious illness four years ago warned him that his life-span was drawing to its end. Undaunted, he continued to work with the same enthusiasm as before, and only a few weeks before he died he completed a full operation list at a Sussex hospital rather than leave his local colleagues in the lurch. When urged to retire a few months before his death he refused, and indeed insisted that knowledge of his illness should be withheld even from his friends. When death came it was mercifully sudden and a very brave man was taken from us.

Tanner was of retiring disposition and self-critical. For these reasons he seldom spoke at medical discussions and wrote sparingly. He was happiest amongst his professional friends when enjoying informal discussions. The Medical Society of London was perhaps his greatest love outside his family. As Editor, Orator and recently President he fulfilled his duties with outstanding ability and drew to himself the admiration and deep affection of the many Fellows with whom he came in contact.

I believe he achieved what he set out to obtain—domestic happiness, professional success, the esteem of his colleagues, a return to his old hospital and a knowledge that he was loved for his honesty, his amazing generosity and his genial spirit.

If the burden of grief lying on his wife and children can be eased, it will be by the knowledge that Bill was admired, loved and trusted by all who knew him. His memory will be revered as long as his friends live. A.H.D.

Reviews

The Pharmacology and Therepeutics of Materia Medica. By W. J. DILLING. Cassell. 19th Edition. *Price* 21*s.*

The 18th edition of this book came out in 1944 and was reprinted three times, the last time in 1948. The 19th edition, issued in January, 1951, has been brought fully up-to-date and includes the modern antibiotics and the chemotherapeutic substances, anti-malarials including proguanil, intravenous iron (incorrectly referred to by one of its trade names), the antihistamines and the adrenocorticotrophic hormone and cortisone. The material is clearly set out with the necessary stress on the pharmacopœial aspects of the subject and on the pharmacological actions on the drugs discussed. There is a section on prescription writing and on the Dangerous Drugs Acts. Unfortunately there is no discussion of experimental pharmacology and of the methods used in the testing of drugs and in the discovery of new drugs. The practitioner who needs some fundamental knowledge, if he is to deal successfully with the mass advertising literature to which he is subjected, will not find it in this book.

J.M.R.

Textbook of Obstetrics. By JOHN F. CUNNINGHAM. William Heinemann, Medical Books Ltd. *Price* 40*s.*

Here is a short textbook of midwifery on good paper with few misprints. It is generously illustrated, but unfortunately many of the pictures are of the " thumb-nail-sketch " type and of little real value, and many are badly placed in relation to the text (pages 21 to 25, for example). Such a remark as that on page 103—" Nowadays vaginal examinations during labour are seldom made," which from the bias displayed in favour of rectal examinations is clearly not Irish for " vaginal examinations during labour should be made infrequently "—serves well to show how great is the difference between the practice of obstetrics in Dublin and London, a difference which is manifest throughout the book, a difference for which Roman Catholicism is clearly only very slightly responsible, and a difference which might prove catastrophic to our metropolitan examinees. H.A.R.

A Synopsis of Regional Anatomy. By T. B. JOHNSTON. Churchill. 7th Edition. *Price* 22*s.* 6*d.*

A new edition of a book which first appeared 30 years ago presents an opportunity for re-assessing its value, since teaching methods and fashions in textbooks change in the course of time. This book has been widely used by students, both under- and post-graduate, for revision of the essential facts of anatomy. To what extent can an anatomist continue to recommend this book for this purpose ? I have no difficulty in advising students to use Johnston's " Synopsis of Regional Anatomy " because it presents to them in a clear way an adequate amount of anatomical knowledge.

This edition contains X-ray plates and some figures illustrating surface anatomy and in this respect the author acknowledges the increasing importance of the study of the living body. There is, in addition, increasing emphasis in the text on function and, as compared with other books of a similar size, the proportion devoted to living anatomy is high. The reviewer, admittedly, would like to see this increased in future editions. Meanwhile, " Johnston " is the best short book on anatomy for 2nd M.B. examinations, assuming the student has already dissected the whole body.

J.J.

Dental Delight

THE following extract from a personal letter may well serve as a vivid and unsolicited commentary on dental practice at the present time, from what our correspondent himself describes as " the receiving end or patient's point of view." :—

" About three months ago I had toothache. The filling came out of one of my two remaining teeth in the upper jaw and a hole appeared in the other. I rang up P. (to whom, as you know, I have been going for more than twenty years) and, after satisfying the voice on the 'phone that I was an old, trusted and tried client dating back into the dim past, was allowed to make an appointment.

" Could they see me at once ? No. Tomorrow, perhaps ? No. The earliest appointment would be in a week's time. But I have *toothache.* Yes, but very sorry, this day week. I must grin and bear it, just too bad.

" The week passed and I gathered together my courage for the ordeal. Yes, the time had come at last. ' Sit in the chair and let me see.—Ah, yes— ' A large form was produced on which many entries were made and which, eventually, I was invited to sign. Arrangements were then to be made with the doctor and I should be informed by post when to attend. The extractions would be made with gas.

" About *a month later* I received a card telling me to attend at 11 a.m. on a Saturday morning. I duly arrived at the dentist's in plenty of time and the waiting room soon filled. All the patients seemed quite happy. There was a sort of general conversation and—well, we were all having gas so there was nothing to worry about. Around 11.30 the first patients were called. Women and children first, and they were disposed of pretty rapidly. I was last but one. The doctor bowed to me as I entered and I returned the compliment. I sat in the chair. ' Loosen the neck, that's right. I am giving gas right away. Breathe deeply—that's splendid.' The filament of the electric lamp above my head changed from white to yellow, then to orange—brown—green—blue—I am breathing rapidly now—black———. What's this ? Something is pulling —what is it—tug-tug-tear-tear-tug-tug-tear-tear—oh, I can't stand it—another tug and tear—light comes. A voice says, ' Your glasses, Mr. G.' Another voice says, ' Perhaps you would like to sit in the other room.' I goose-step into the other surgery, supported by the elbows, and I slump into the chair. I feel all out. ' Spit in the bowl,' says a voice. I move my head left and right—I can see no bowl. ' Here.' And I discover one of those kidney-shaped enamel saucers held in front of me. I must pull myself together. Yes, I must. But oh, I do feel so bad. I wash out my mouth now and discover a piece of flesh hanging from the roof. It feels about an inch long and half-an-inch wide. (Here I might mention that about five days later this piece of stuff came away. It was blackish-grey and measured only $\frac{1}{4}$ inch long and $\frac{1}{8}$ inch wide.)

"I was asked if I felt well enough to leave. I said yes, only too glad to get outside ! The car was in the park and I staggered back there and sat in the seat. Rest was the one thing I felt I wanted. After about half-an-hour I proceeded home. There was still a great amount of pain from the jaw and this continued for about ten days ! "

" Oh ! Death, where is thy sting ? "

A Visit to the Tower

ONE of Guy's pre-war ties of friendship with her near neighbours was renewed on Friday evening, July 7th, when a team from the Students' Union played the Yeoman Warders' Bowls Club at the Tower of London. This was the first visit since before the war and the Warders extended a most cordial welcome to their guests from the Borough.

The Warders, playing on their home ground, excelled at this ancient sport and won on both of the greens in use, in one case their lead was a few points only, but in the other they had an overwhelming score.

Guy's, as always, displayed great enthusiasm and, although bowls is primarily a game of skill, it was cheering to see that it was possible, on occasions, to gain the odd point by brute force and ignorance.

The team from the Hospital was well encouraged by their supporters who turned up in ever increasing numbers as the evening wore on; indeed, it appeared that many of them had valiantly left the " George " well before closing time in their zeal to aid the side.

After the match everyone, both players and spectators, adjourned by invitation to the Warders' Mess where victory was celebrated and defeat erased from memory in customary fashion.

At ten o'clock the Guy's party was privileged to witness the Tower's very own and ancient ceremony of " The Keys " when the Chief Warder, with his military escort, lantern and jangling keys, made his final round for the night.

This ended in a fitting manner a most enjoyable and friendly visit to the Tower of London, and it is to be hoped that this match will once more become an annual event.

Bowls was quite new to some of the team but the elements of the game and he technical terms were soon mastered, in fact many felt how grand it would be were it possible to play the noble game of Drake at Honor Oak Park on a summer's evening.

G.H.K.

Sport

CRICKET

Inter-Hospitals Cup Competition Final

Guy's *v.* St. Thomas's

Result—Won

Guy's 355 and 141–6. St. Thomas's 310 and 185

After defeating St. George's and St. Mary's in the preliminary rounds, Guy's regained the Cup by defeating St. Thomas's in the final.

LAWN TENNIS

Guy's 1st VI *v.* Royal Naval College, Greenwich

At Greenwich. Result—Won 7—2
5th June, 1951

Guy's 1st VI *v.* Winchester L.T.C.

At H.O.P. Result—Won 5—4
16th June, 1951

This was an enjoyable return match played in fine weather on grass at its best after the rain. The team avenged its earlier defeat against experienced and very sporting opponents.

Results

C. H. Opie & P. J. Frost	2—1
P. Dwyer & D. V. Duckworth	1—2
E. G. Searle & J. A. Bullard	2—1
Won	5—4

Guy's 1st VI *v.* West Herts. L.T.C.

At Watford. Result—Lost 2—7
23rd June, 1951

A very pleasant first match against West Herts., though Guy's were handicapped by the absence of three of their better players. The home team was strong and played well, and some doubtful " spots " on the grass seemed to add to the visitors' difficulties.

Guy's 1st VI *v.* Eastbourne L.T.C.

At Eastbourne. Result—Won 7—0 (rain)
1st July, 1951

Guy's 1st VI *v.* Chiswick T.C.

At H.O.P. Result—Won 9—0
7th July, 1951

Guy's 1st VI *v.* City of London Police

At Brixton. Result—Draw 2—2
11th July, 1951

Guy's 1st VI *v.* Paddington

At H.O.P. Result—Won 8—1
14th July, 1951

In fine conditions, this return match provided some interesting tennis. It showed how often in doubles, attacking the net and firm overhead play will pay dividends. And with their older opponents often hugging the base-line, Guy's swept on to an easy victory.

Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Registrar** in the **Department of Conservative Dental Surgery** with attendance on 6 sessions per week to commence duties in October, 1951.

Salary will be at the rate of £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **22nd August, 1951.**

Applications are invited for the post of **Resident Medical Officer, Nuffield House** (two vacancies), one commencing on August 21st and the other on October 6th. The post is subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Salary £700 per annum, less £100 per annum for board and lodging.

Applications should be lodged with the Superintendent on or before **11th August, 1951.**

Applications are invited for a full-time **Research Fellowship in the Thoracic Surgical Unit** for research on cardiovascular problems commencing on 1st October, 1951. It is desirable that applicants should possess a higher qualification in Surgery. Salary will depend upon the experience of the person appointed. Applications, with names of three referees, should be sent to the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, not later than the **7th August, 1951.**

PAPERS BY GUY'S MEN

Bradley, W. H. Contribution to Medical Annual, 1950. Rheumatic Diseases, their Social Importance (p. 295).

Camps, Francis E., and others. Homologous Serum. Hepatitis and Measles Prophylaxis. A Report to the Medical Research Council. *Brit. med. J.*, 1951, ii, 6.

Clarkson, Patrick, Walker, F. A., and another. Combined Reductions of the Lower Jaw and Nose. *Brit. med. J.*, 1951, ii, 26.

Heber, A. J., and another. Experiences in a Field Surgical Team Working in Pahang State, Malaya. *J. R. Army med. Cps.*, 1951, **96**, 339.

McKeown, Thomas, and another. Observations on all Births (23,970) in Birmingham, 1947. II.—Birth Weight. *Brit. J. Social Med.*, 1951, **5**, 73.

Ogilvie, Sir Heneage. The Treatment of Advanced Cancer. *Practitioner*, 1951, **167**, 48.

GUY'S THEATRE CLUB

It is hoped that the next production by the Guy's Theatre Club will take place in December, 1951.

An audition for male characters only will be held on Friday, 3rd August, 1951, at 5.30 p.m., in the Anatomy Theatre.

Will anyone wishing to take part please notify the Hon. Secretary.

GUY'S HOSPITAL REPORTS

1951. Vol. 100. Parts 1–2.

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Patent Ductus Arteriosus with Reversed Shunt due to Pulmonary Hypertension. By Maurice Campbell and Reginald Hudson, p. 26.

The Value of Clinical Laboratory Tests. III.—Serum Protein Levels in Disease. By W. H. H. Merivale and D. R. C. Willcox. p. 45.

Asthma: A Survey of 594 Patients. By R. Kauntze, T. H. Shire and N. Southwell, p. 69.

A Preliminary Report on the Motor Activity of the Stomach after Thoraco-Lumbar Sympathectomy. By Charles Nicholas, p. 89.

The Abortion Rate. By Hujohn A. Ripman, p. 121.

A Simple Apparatus for the Continuous Quantitative Recording of the Respiration Rate during Anæsthesia. By J. H. Benson, E. B. Reeve and G. W. Taylor, p. 129.

A Note on the Progression of Non-diabetic Glycosuria to Diabetes Mellitus. By J. C. Houston, p. 145.

Hæmatological changes in Cases of Congenital Cyanotic Heart Disease which have been submitted to Operations designed to Improve the Circulation of the Lungs. By W. D. Brinton, p. 148.

CHANGES OF ADDRESS

Henry Blazeby, M.R C S., D.A., The Old Customs House, Upstrand Street, Sandwich, Kent. Tel.: Sandwich 278.

W. M. Mollison, C.B.E., M.Ch., Pickets Hill, Ringwood, Hants. Tel.: Ringwood 845.

L. G. Richards, B.D.S., St. Mary's Croft, Chapel Field North, Norwich. Tel.: 21824.

H. W. Trusted, M.B., B.Ch., 5, Pennsylvania Park, Exeter, Devon.

Douglas Wain, O.B.E., L.D.S., 355, Wilmslow Road, Fallowfield, Manchester.

R. G. Watson, M.B., B.S., Dept. of Dermatology, University Hospital, University of Michigan, Ann Arbor, Michigan, U.S.A.

BIRTHS

BOSWELL.—On July 15th, 1951, at Tantah House, Peebles, to Joan (née White), wife of David R. Boswell, B.D.S.—a son (Robert David).

GREEN.—On July 12th, 1951, at St. George's Hospital, to Molly, wife of Ronald Green, M.B., B.Ch., D.A.—a daughter (Janet Elizabeth), a sister for Malcolm.

RIPMAN.—On July 20th, 1951, at Nuffield House, to Joanna, wife of Hujohn Ripman, F.R.C.S.—a son.

SICHEL.—On July 9th, 1951, to Betty, wife of Dr. G. R. McK. Sichel, of Welford, near Rugby—a son.

MARRIAGES

SHOTTS—LAYMAN.—On Sunday, July 29th, 1951, Alan Shotts, L.D.S., R.C.S.(Eng.), to Barbara Jane Layman, S.R.N.

DEATHS

TANNER.—On July 5th, 1951, suddenly, at 38, Queen Anne St., W.1, William Edward Tanner, M.S., F.R.C.S., aged 62.

EDS: R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

THE Borough of Southwark is one of the most interesting as well as one of the most ancient parts of London, and Guy's, which has served " the Borough " for well over 200 years, takes a pride as well as an interest in its history.

Southwark became a " Royal Burh " over a thousand years ago and with the City of London and the City of Westminster formed the beginnings of what now we call " London." Nor, indeed, did this represent the earliest settlement here for men had lived in these parts since Roman times. Happily, the present Borough Council is more aware than many Borough Councils of their ancient history and traditions and has gone to much trouble to signpost many of the sites of former buildings of historic interest. Some still stand, but the constant changes, demolitions, rebuildings, and heavy bombing have taken a heavy toll. There is much still to see, however, and anyone with an interest in history and a chart to guide him can still find many of the old landmarks. The closer one looks the more easily can one see evidence of old streets, and buildings and boundaries. With this in mind we are publishing in this issue a list of all the sign boards erected by the Borough Council which has kindly been given us by the Borough Engineer. Most of us knew already of a few of the places mentioned but the wealth of historical associations may come as a surprise when we read down the list—a cathedral on a site with a history of Christian worship over 1,300 years ; the Elizabethan Play Houses ; Michael Faraday's birthplace ; Debtor's Prisons ; the scenes from Dickens' books ; and Chaucer's Tabard Inn. Most of these are within a few hundred yards of Guy's and some of those unable to leave the Borough at the week end might do much worse than spend part of it exploring their own neighbourhood. If they do so they might well agree with the concluding paragraph of the publication " Historic Southwark."*—" Southwark is unique. It has been the home of bishops and scholars, playwrights and poets, fighting men and actors, scientists and scalliwags. Immortal literature has been written in the old Borough. Pilgrims from afar have ambled through it's streets. The same is true today. People still come to Southwark to walk in the footsteps of Shakespeare and Dickens. Many come to the Cathedral for spiritual, musical and architectural enjoyment, and to Guy's Hospital to benefit from the ministry of healing."

The thoughtful article entitled " The Athletic Ideal," by Dr. Vertue, which appears in this issue is, we believe, deserving of study by all students and those responsible for their education. The *Gazette* has, on many occasions, pleaded for a curtailment of the medical curriculum in the interests of more liberal education and of allowing for more athletic pursuits. The summer months, when the next year's time table is being prepared, is perhaps the best time to suggest that some farsighted and bold experiment on these lines might be planned. It is never too late to make up for deficiencies in technical training but the influence of a liberal education is greatest on those in their second and third decade. We should never forget that most of the students from this Hospital become general practitioners and for training these there are few concepts more important than that contained in " The Athletic Ideal."

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* Handbook, Guide for Visitors, officially published by the Southwark Borough Council. *Price* 1*s*.

Obituary

ARTHUR HERBERT SPICER

DR. ARTHUR SPICER, aged 79 years, died suddenly while bathing at Barton-on-Sea. He was the son of Reuben Spicer of High Wycombe, Buckinghamshire. He was educated at Leys School, Cambridge, and later at Guy's Hospital. He qualified in 1896, M.B., B.S., M.R.C.S., L.R.C.P. and later D.P.H. After various appointments he started general practitioner work in Petworth, later moving to London in 1909. During the first world war he served in France and gained the Military Cross and retired with the rank of Major. After the war he returned to London and in 1938 he retired to Graffham, near Petworth. There he became a member of the local Rural District Council and served on the Committee of Petworth Cottage Hospital, and during the second world war he did valuable work as a Medical Referee. Arthur Spicer identified himself with the activities of the village in which he lived. He was instrumental in opening many footpaths ; he was a lover of nature and an ardent bird watcher, being a member of the Bird Watcher's Society. He was much loved in this village and by all the neighbouring doctors. He leaves a widow, a daughter and three grandchildren.

Historic Southwark

SIGN BOARDS	SITES
To sites of the Elizabethan Play Houses ; Shakespeare's Globe ; The Rose ; The Hope ; The Bear Baiting and Bull Baiting Amphitheatre.	On Barclay Perkins' Brewery at the corner of Park Street facing Bankside.
Dr. Johnson, the great friend of Mrs. Hester Thrale and Henry Thrale, M.P. for Southwark and owner of this brewery from 1758 to 1781, spent much time here and was present when the brewhouse was sold in 1781 to Robert Barclay and John Perkins.	Near entrance to Messrs. Barclay Perkins, Ltd., bottling department in Southwark Bridge Road.
Michael Faraday, the father of modern electrical science, was born near this spot.	Corner of Walworth Road and Draper Street.
Site of Duke of Suffolk's Palace—16th century.	Bombed site opposite Leyton's buildings.
Site of the old King's Bench Prison—1376–1758.	Bombed site at corner of Leyton's buildings.
To Nancy's Steps—Described by Dickens in " Oliver Twist "	London Bridge approach, between Bridge House Hotel and Hibernia Chambers.
At rear of this ground stood the pilgrim church, erected as a memorial to the Southwark contingent of the Pilgrim Fathers who, in 1620, sailed to America in " The Mayflower."	Lock's Burial Ground, Old Kent Road.
Site of St. Thomas's Hospital, 1225–1865. The first Bible in English was printed here, 1537 A.D.	Sub Post Office, 19a, Borough High Street.
Southwark Cathedral—On site of a Roman villa—For 1,300 years Christians have worshipped here. A.D.607 a Nunnery ; A.D.1107 a Priory ; A.D.1540 a Parish Church ; A.D.1905 a Cathedral. Pilgrim, stay and reflect on the great men who are commemorated within these walls. Among them are :— St. Swithin : Cardinal Baufort : Gower : Chaucer : Shakespeare : Messinger : Fletcher : Alleyn : Beaumont : Johnson : Goldsmith : Bunyan and Bishop Andrews, all of whom resided here in their day.	On Cathedral railings at London Bridge Approach.

Through Churchyard to :— Sites of Elizabethan Play Houses. Shakespeare's Globe : The Rose : The Hope : The Bear Baiting and Bull Baiting Amphitheatres.	On railings by Cathedral Steps, London Bridge Approach.
Site of the Marshalsea, 1376–1811. Bishop Bonner died here—1569.	163, Borough High Street.
The Marshalsea Debtor's Prison. The Building on the right of the court was once the Marshalsea Debtor's Prison, immortalized by Charles Dickens in " Little Dorrit."	Flank wall of No. 207, Borough High Street.
Site of the White Hart Inn, immortalized by Shakespeare in " Henry the Sixth " and by Charles Dickens in " The Pickwick Papers."	Flank wall of No. 63, Borough High Street.
This Building stands on the site of the old Tabard Inn, whence Chaucer and the Pilgrims set out for Canterbury, 1383 A.D.	The Tabard, Borough High Street.
Charles Dickens lived in this street in 1824.	Lant Street at corner of Borough High Street.
St. George-the-Martyr Church (Little Dorrit's Church). A church has stood here since Norman times. Immortalized by Charles Dickens in " Little Dorrit," this church is the burial place of Bishop Bonner who died in the Marshalsea Prison in 1569, and of Cocker, the 17th century mathematician. Southwark fair was formerly held outside the church. Hogarth's famous engraving " Southwark Fair," dated 1733, shows the tower of the former church.	In gardens on North side of the Church, fronting Borough High Street.
The George—London's only galleried inn. Immortalized by Charles Dickens in " Little Dorritt."	Flank wall of No. 75, Borough High Street.
Site of St. Margaret's Church (13th century) and the Borough Compter (16th century).	On face of Westminster Bank (Borough branch).
Winchester Square—Remains of Winchester Palace (13th century).	On Pickford's warehouse, Winchester Square.
The original " Blue Eyed Maid," mentioned by Dickens in " Little Dorrit," stood on this site.	The " Blue Eyed Maid," 173, Borough High Street.
Nelson Square—Percy Bysshe Shelley lived at No. 26 Nelson Square.	Flank wall of 184, Blackfriars Road.
Robert Browning was baptised in York Street Chapel, new Browning Hall, where his family worshipped for many years.	Flank wall of Browning Settlement, Walworth Road.
Near this spot was the shrine of St. Thomas A'Watering where the Pilgrims rested on their way to Canterbury.	The ' Thomas A' Beckett." Public House at corner of Albany Road.
The Queen's Head Inn, owned by the family of John Harvard, founder of Harvard University, formerly stood here.	Flank wall of No. 103, Borough High Street.
Swan Theatre—Near this spot was the Swan Theatre, in the former manor of Paris Gardens, where Shakespeare acted.	At N. corner of Stamford Street, facing Blackfriars Road.
In this building is " The Rotunda " a famous concert and meeting hall of the early 19th century. Robert Owen frequently held meetings here.	No. 6 Stamford Street.
Here stood Rowland Hill's Chapel (Surrey Chapel), afterwards used for boxing as " The Ring." Surrey Chapel was transferred to Christ Church, Westminster Bridge Road.	N. corner of Union Street fronting Blackfriars Road.

Horsemonger Lane Gaol stood here from 1798 to 1879. Leigh Hunt, when imprisoned here for libel, was visited by Lord Byron and Tom Moore. Charles Dickens agitated for the abolition of public executions after witnessing a double execution here in 1849.	Near the entrance to Newington Recreation Ground in Hape Road opposite Brookham Street.
At the rear of this notice the Roman Roads, Watling Street and Stone Street met. Watling Street—Richborough to Chester. Stone Street —From Chichester.	N. corner of Layton's Buildings, facing Borough High Street.
Near this site stood the Newington Butts Theatre, where Shakespeare acted. " at the Elephant, is best to lodge ; " —*Twelfth Night.*	Vacant site North of Spurgeon's Tabernacle, fronting Newington Butts.
Site of the former King's Bench Prison. Here Charles Dickens made Micawber a debtor prisoner in his book, " David Copperfield."	Messrs. Allard & Co's. premises, Queen's Buildings, Borough Road.
Guy's Hospital, founded by Thomas Guy in 1724. John Hunter and Sir T. Astley Cooper were two of its famous surgeons. Keats, the poet, was a medical student at this hospital.	On 25, Borough High Street (corner of St. Thomas' Street).
Here stood the Surrey Theatre, formerly the Royal Circus. Charles Dibdin, author of " Tom Bowling" and many other sea songs, was once the owner.	Car park on S. side of "Flowers of the Forest" public house, Blackfriars Road.
Here stood the Roman Catholic Chapel ministered by Father Thomas Doyle, who inaugurated the fund for the building of St. George's Cathedral. Not erected.	"South London Palace" London Road. (NOTE : this board cannot be erected as the whole of the site is occupied by hoardings.)
Here was the " Stones End " where " Town Street " met the old turnpike road. One of the Parliamentary forts, erected to defend London during the Civil War, stood here.	On old police station, Borough High Street.
Suffolk House. Near this spot was the house of Thomas Brandon, Duke of Suffolk, who married a daughter of Henry VII. He also had royal powers to mint money here.	N. corner of Marshalsea Road, fronting Borough High Street.

Correspondence

Dental Delight

SIR,—With regard to your publication of a letter concerning dental treatment, in your last issue, an interesting point arises. Why is it that an experience of this type, which would arouse indignation when applied to any other profession, is merely amusing when applied to dentistry ? This attitude is adopted not only by the casual reader, but to some extent by the victim himself, the medical, and even the dental profession.

Is it too much to hope that space in the *Gazette* may be devoted to articles designed to improve our attitude to, and our practice of, dental surgery ?

Yours, etc.,

PETER J. HILL.

Hypothyroidism—Gull's Disease.

By CHRISTOPHER HARDWICK, M.D., F.R.C.P.

A Clinical Lecture given in Guy's Hospital Medical School on 13th April, 1951.

LADIES AND GENTLEMEN.—These lunch-time sessions are advertised as Clinical Lectures and so today, instead of discussing some learned and particular subject in detail with you, I merely wish to describe five cases of hypothyroidism and to emphasise certain points about them.

First, we must pay our tribute to Sir William Gull, one of the greatest of our alumni, for it was he who gave the original description of this disorder. Gull was the youngest of eight children, and in 1827, when he was only eleven years old, his father, a barge-owner, died of cholera. This reminds us of the dread diseases which were rife in this country at that time and shows the progress that has been made in the public health during the last hundred years or so. At the age of twenty-one Gull obtained an apprenticeship at Guy's which gave him two rooms and the princely salary of £50 per annum. From our own experience we can understand how it was that he was so captivated by the atmosphere of Guy's that he lived within its precincts for the next fifteen years. During that time he taught physiology, comparative anatomy, materia medica and a subject which you may feel glad you no longer have to master—natural philosophy. One feature about him which particularly appeals to me is that he was always careful to describe himself as a " Clinical Physician."

It was on October 24th, 1873, that Gull read a paper to the Clinical Society of London entitled, " *On a Cretinoid state supervening in adult life in women.*" The following is his account of one of the five cases he described :—

" The remarks I have to make upon the above morbid state are drawn from the observation of five cases. Of two of these I am able to give many details, but the three others were only seen by me on one or two occasions.

CASE 1

" *Miss B.*, after the cessation of the catamenial period, became insensible, more and more languid, with general increase of bulk. This change went on from year to year, her face altering from oval to round, much like the full moon at rising. With a complexion soft and fair, the skin presenting a peculiarly smooth and fine texture was almost porcelainous in aspect, the cheeks tinted of a delicate rose-purple, the cellular tissue under the eyes being loose and folded, and that under the jaws and in the neck becoming heavy, thickened and folded. The lips large and of a rose-purple, alæ nasi thick, cornea and pupil of the eye normal, but the distance between the eyes appearing disproportionately wide, and the rest of the nose depressed, giving the whole face a flattened broad character. The hair flaxen and soft, the whole expression of the face remarkably placid. The tongue broad and thick, voice gutteral, and the pronunciation as if the tongue were too large for the mouth (cretinoid). The hands peculiarly broad and thick, spade-like as if the whole texture were infiltrated. The integuments of the chest and abdomen loaded with subcutaneous fat. The upper and lower extremeties also large and fat, with slight traces of œdema over the tibiæ, but this not distinct, and pitting doubtfully on pressure. Urine normal. Heart's action and sounds normal. Pulse 72. Breathing 18.

" Such is a general outline of the state to which I wish to call attention."

A less scholarly but perhaps more dramatic account of hypothyroidism is found in a book which is hardly a text book of medicine, " The Citadel," by A. J. Cronin :—

The patient " had been ill and unlike himself for three weeks, but during the night he had turned violent, and gone clean out of his mind. He had set upon his wife with a bread knife . . . . His face seemed swollen, the nostrils thickened, the skin waxy, except for a faint reddish patch that spread across the nose. The whole appearance was heavy, apathetic. Andrew spoke to him

He muttered an unintelligible reply. Then, clenching his hands, he came out with a tirade of aggressive nonsense. . . . The skin was dry and rough, the fingers slightly thickened at the ends. Temperature—it was subnormal. . . . The clumsy speech, dry skin, spatulate fingers, the swollen inelastic face, the defective memory, slow mentation, the attacks of irritability culminating in an outburst of homicidal violence. Oh! the triumph of the completed picture was sublime."

The first of my cases was referred to Out-patients on account of constipation. I cannot compete with the descriptive powers of the two authorities I have quoted, but the clinical picture was summed up by the entry in her notes—" Complains of being constipated for years—and looks it."

Mrs. Mabel D., aged 46 years, was first seen in October, 1947, on account of increasing constipation during the previous two years which had become almost absolute in the preceding two months. In the previous February she had attended hospital on account of a microcytic anæmia which had proved to be resistant to iron.

On examination she presented the typical appearance of myxœdema. Temperature 96·8°F. Pulse 67. Weight 7 stones 13¾ lbs. Remarkably pale with dry skin. Nails normal. Hair coarse. Eyebrows normal. Palpebral fissures narrowed. Subcutaneous tissues thickened with pouting of the lips. No abnormality detected in any system. Blood pressure 140/110. Blood count, R.B.C. 2·8 million, hæmoglobin 58%. Cholesterol, 310 mgs. per 100 mls. B.M.R. minus 53.

She was put on thyroid and by December her hæmoglobin had risen to 70%, and by January it was 100%. There was a remarkable change in her appearance; she had gained weight to 8 stones 9 pounds, and her blood pressure had fallen to 150/90.

The second patient was referred as a case of myxœdema by Mr. Reading to whom she had been sent by her practitioner because of the gradual development of a husky, croaking voice.

Mrs. M. F., aged 63 years, complained that for two years she had been getting fat and had become slow in thought and action. She felt the cold considerably, and her voice had altered until it was a hoarse croak.

On examination she presented the typical appearance of myxœdema. The temperature was subnormal. Pulse rate 64. Blood pressure 200/140. After one month's treatment there was striking improvement in her condition, the blood pressure had fallen to 170/105 and she was able to visit the hospital by herself and did not have to be accompanied by a relative. After a further month her weight had fallen from 9 stones to her usual 7½ stones.

The third patient was sent up as a case of nephritis without albuminuria. She had been treated without success by dieting and mercurial diuretics.

Mrs. D. W., aged 45, complained of swellings under the eyes for the previous six months. Her relatives added that she had become slow and forgetful and careless of her household duties.

On examination. Typical appearance with " œdema " beneath the eyes particularly pronounced, also " strawberries and cream " complexion. Weight 9 stones 6 pounds. Temperature 97°F. Blood pressure 150/90. Hæmoglobin 60%. Red cells 3·2 millions. Colour index 1·0.

After one month on L-thyroxine 0·5 mgm. twice daily the puffiness of the face disappeared and she regained her previous energy. The blood pressure fell to 135/80.

The fourth patient was referred by her doctor on account of pigmentation and Addison's disease was suspected. On questioning her, however, she admitted to symptoms, some of which were very characteristic of hypothyroidism.

Mrs. K. W., 61 years, had become increasingly pigmented during the previous year. There had also been loss of energy, aching in the legs, increase of weight and huskiness of the voice. She had also become very nervous and had ceased going out. Memory was impaired.

On examination there was a generalised brown pigmentation, most marked on the face and hands. The face was almost Mongolian, it was rounded and coarse ; there was puffiness under the eyes, the eyebrows were scanty and the skin was dry. Pulse 68. Temperature 95·8°F. Blood pressure 150/90.

On 1 grain of thyroid extract three times a day she rapidly began to improve. After three weeks she developed mild congestive heart failure. The dose of thyroid was reduced to a grain a day and after rest in bed for a week she recovered.

Since then she has made steady improvement and has lost all her pigmentation.

The fifth patient, also a woman, was an example of myxœdematous madness. Her illness had been allowed to progress for some years before a doctor was called in and, though the physical state responded to thyroid extract, there was no improvement in her mental state.

Mrs. F. W., 58 years, for some years before admission had become increasingly idle and apathetic. Finally all she would do was to sit by her fire, entirely neglecting her household duties and being dirty in her habits. Her relatives said she became very fat, " as if there was water under the skin of her hands and below her eyes." All her hair fell out.

Under treatment with thyroid in Teddington Hospital the myxœdematous condition was corrected. By the time she was admitted to Guy's her otherwise bald pate was covered with a fine downy hair.

Mentally there was a marked lack of spontaneous activity with emotional depression and a defect of memory for recent events. Her madness was judged to be incurable and she was transferred to an asylum.

SYMPTOMS

If a patient were to complain of all or most of the symptoms of myxœdema as detailed in our text books few doctors would have any difficulty in diagnosing the disorder. But notice that each of these patients complained of one, or at the most two things only. Constipation, hoarseness, pigmentation and œdema of the eyelids were the disabilities which were uppermost in their minds, the other symptoms were present but it required direct questioning to bring them to light, and very often it was the patient's relatives who had to supply the details. The most striking illustration of this was Case 4. Apparently her personal appearance was this lady's only worry ; further details of lethargy, forgetfulness and neglect of home duties were supplied by her mother. Interestingly enough, when the patient recovered she volunteered the information that she had not realised to what a state she had declined. No doubt the slow progression of the symptoms and the accompanying mental blunting accounted for this state of affairs.

" *Rheumatism* " is a symptom which requires emphasis. Pains in the limbs occur frequently ; Cases 3 and 4 both had them and they were partly responsible for the pigmented lady keeping to her house. In these days any pains in the limbs are likely to be put down to " rheumatism," both by the patient and, very often, by the doctor as well. As this may be the only symptom of which the patient will complain it is easy to see how they may find their way to the physiotherapy department.

SIGNS

The appearance of a patient with a severe degree of hypothyroidism is striking and it is well demonstrated by the photographs of these patients. The coloured photographs of the third patient are particularly instructive ; notice the complexion which has been well described as being that of " strawberries and cream." The thickening of the tissues, " myxœdema," is responsible for the pouting of the lips as well as the narrowing of the eye-slits.

Increase of weight is widely held to be characteristic of hypothyroidism and anyone who is overweight is liable to be given thyroid, often until toxicity results, in a vain attempt to slim them. None of these five patients, however, were fat and indeed the first patient had lost weight. Any increase in weight is probably due not so much to fat as to the deposition of that gelatinous material that has given rise to the name myxœdema. This may be most noticeable in the neck but supra-clavicular pads of fat were not present in any of these patients.

Changes in the hair usually occur but it is not necessarily the outer half of the eyebrows that is affected. The hair loses its lustre and becomes coarse and then may fall out. The fifth patient was completely bald but this must be very unusual.

The hypertension which occurs in this disorder is noteworthy. It is, of course, the exact antithesis to that which occurs in Grave's disease. In that condition the increased heart action causes some increase in the systolic pressure and the widespread vasodilation results in a fall in the diastolic figure with a consequent increase in the pulse pressure. In hypothyroidism there is an impoverishment of the heart's action and the systolic blood pressure is little altered, the diastolic figure is moderately raised. With treatment the blood pressure falls to normal.

TREATMENT

This is one of the most satisfactory conditions to treat. All the physical abnormalities can be corrected by giving thyroid extract; myxœdematous madness does not always respond to treatment but sometimes the results are dramatic.

Thyroid extract was first used in this country in 1891 by Professor G. R. Murray. In 1920 he was able to give an account of the complete life history of the first patient to receive this treatment. This was a lady who developed this disorder at the age of forty-six and who was treated continuously until she died in May, 1919, at the age of seventy-four years. In those days the preparation used was " liquor thyroidei " B.P., and during nearly thirty years this lady drank over nine pints of liquid thyroid extract or its equivalent, prepared from the thyroid glands of more than 870 sheep.

Dried extract of thyroid was introduced later and proved most effective. The initial dose should be small, say half a grain twice daily, and it can be cautiously increased until a dose sufficient to abolish all symptoms is reached. This dose must be kept up for the rest of the patient's life. If too large a dose is given to begin with cardiac failure may result. This occurred in Case 4.

The active principle of thyroid extract is the lævo-rotary isomer of thyroxine. This was successfully synthesised by Harrington in 1927, and it has recently been manufactured on a commercial scale. The synthetic preparation has the advantage over the dried extract in that it is constant in its action whereas different samples of the dried extract may contain varying amounts of the active isomer and so may vary in their action. The dose of L-thyroxine is extremely small, 0·1 mgm. per day is usually ample for maintenance and to commence treatment half or quarter of this may be used.

The treatment of hypothyroidism by giving synthetic or natural thyroid extract is thought to be substitution therapy—the replacement of a natural secretion by a substance given by mouth. When a dose of 3–4 grains or more a day was given it was not difficult to envisage its mode of action, but when it is found that only 0·1 mgm. a day is required it becomes extremely difficult to understand the mechanism by which it produces its effect. How can we explain the way in which such a minute quantity of a substance, taken by mouth and surviving the hazards of intestinal absorption, is yet sufficient to raise the metabolic rate, stimulate red cell production, restore the subcutaneous tissues to normal, raise the temperature and pulse rate, enhance the growth of hair, increase the intestinal movements and repair the cerebral damage responsible for the production of myxœdematous madness ?

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The Athletic Ideal

By H. St.H. VERTUE

OF all the fine sayings in that fine book *Trevelyan's Social History of England* none is better than the sentiment that the Greeks and Romans are honorary Englishmen. If any one would like to find himself back in that particularly English institution, the Sixth Form, let him take up the early dialogues of Plato. Here they come, trooping in from the playing fields, the palæstra they call them, where training for the sports has been going on, laughing and talking cheerfully together ! They have the same sense that we have that this culture of the body by exercise and discipline is part of a man's proper business, is far superior to mere self-indulgence and will lead to more happiness in the long-run. They share with us, too, a pleasure in the beauty of young limbs ; but whereas in their case it is openly acknowledged, in ours it is half ashamed to make itself known. This is because they have never heard, as we have, of the barbarous doctrine that the body is opposed to the soul and must be kept under, but believe instead that one of their highest aims is to make a harmony of the two. Complementary to this joy in the vigour of the body is another in the exercise of the mind. They delight in asking questions among themselves, which are of just the sort that we know. " What exactly is wisdom ? " " Can there be a science of science ? " " What is true friendship ? " Although no one finds the answers, all are agreed that so to occupy one's mind is a most laudable way of spending one's time. A remarkable good humour pervades the debates and even a slight vein of flippancy can be discerned here and there ; for that deadly earnestness that is the fruit by an ill conscience, a grievance or a sickly feeling of inferiority is unknown.

One day we meet them coming from a religious ceremony, clad in white, just as though it were St. Peter's Day or All Saints and they in their surplices ; for among us both the individual has the same privilege and the same responsibility : he is presented with the national religion as his birthright and along with it freedom of thought and freedom of speech.

To this Sixth Form of old time we have as a guide one who has a lively appreciation of the beauty of youth. We have often encountered such persons in our own day, but this one is a little warmer in his expressions of admiration than any to whom we have been accustomed : in fact he takes it for granted that his enthusiasm will be regarded as highly meritorious. Still, he is insistent that all should be kept strictly within the bounds of propriety, and one day he is to give the world a beautiful allegory on the sugject about two horses, a dastardly dark and a noble white. We look upon his feelings with equanimity, because we understand so well how they came into existence. His emotion, not having the usual object on which to spend itself, has been deviated from the more ordinary course : he feels as he does about the boys because there are for him no girls. If we were to reprehend him for this attitude we should be guilty of provincialism ; for he is sincerely convinced that the course that he has taken is the loftier and the nobler of the two. As women are seldom artists or poets of consequence, and are statesmen or warriors or philosphers never, why waste admiration and affection on so inferior a creature ? Let her keep in the house, breed children and spin ! Most Athenians of the great period were of the same opinion and poor woman had then but a single champion, Euripides.

In our society it is very different. Woman has been granted the right to lead her own life in her own way. We recognise, too, that the majority of men cannot come to their full stature nor attain to a complete happiness without her. Yet both sexes like to be by themselves at times. Her charms, too, are being exploited all round us with tasteless vulgarity and nauseous profusion. A man may sometimes wish to get away from such things, as well as from some others of a far more serious sort that deform our age ; or he may look for light upon subjects where our century has shed only darkness. Let him then take up his Plato and he will find himself in a fresh, invigorating atmosphere. He may walk by the banks of Hissus, paddling his feet in the cool waters, seek the grateful shadow of the giant plane and hearken to the discourse of one of earth's wisest and most courteous sons.

Soc. What ! my dear Phædrus, do you not think I am inspired ?

Phædrus (cautiously). Well, Socrates, you certainly have a wonderful flow of words.

With such little strokes of humour to delight him as he settles down to the full enjoyment of his task, he experiences a very agreeable feeling : it is that of the man who, having roamed far and wide, has arrived back at the pleasant place from which he started. The traveller has come home again.

Whenever I consider such a matter as this, the question occurs to me whether we here attend at all to this ideal of the harmony between the trained mind and the trained body. In our old universities it was being well sustained forty or fifty years ago and in our schools less perfectly, because there the emphasis on athletics was disproportionate ; but I should say that there is not and never has been much attempt to make the harmony among ourselves, to whom the body is the subject of physiology and pathology, but beyond them counts for not quite nothing. Not quite—for there is a pride in the performances of the hospital's athletic teams, into which there enters an ésprit de corps. But how astonishing is this general indifference to the body in a profession whose business ties with health ! The leaders of medicine have made a false assumption from the beginning. Instead of adopting the academic way of life they have chosen the commercial ; and lest there be any misconception about the meaning of a word, let me add that the Academy was a park with trees where Plato taught. By their choice they have condemned their pupils to the lot of the season-ticket-holder, the toiler and moiler in office, factory and shop. Osler knew better. The first medical round that ever I attended was with him at the Radcliffe Infirmary. Shades of the prison-house were beginning to close, for it happened to be one of those mild and sunny afternoons in autumn that ameliorate our chilly, cloudy climate. Osler shook his head at us. " You should all be out playing football," he said ; and taking " football " as a synecdoche, a part expressing the whole, I should maintain that Osler was right.

Saturday afternoons and Sundays the students have in common with the rest of humanity, Wednesday afternoons as a concession, at which times a limited number devotes itself to the education of the body ; but all should have the opportunity for exercise *every day* (not always by means of organised games), which by example and by general opinion they should be encouraged to take. Work would benefit ; for two hours of study after good exercise are worth three without it. When the body is in first-class condition, the mind has a freer range, the invention soars higher, the memory is sharper and the faculty for attention is keener. The number of lectures and classes given might be a little diminished ; but each man who supposes that his own could not well be less believes also that the total has now become too large. There is a fitness not to be measured by blood-counts, X-ray films or the sedimentation of red cells ; there is a sustained enjoyment of life that can only be earned by exertion ; there is a self-discipline that has a salutary effect upon character : these benefits are worth a few lectures. I know that there is a health service for students ; but the best investment for health is abundant fresh air and exercise. The " neurosis," so called, does not flourish under such conditions. Even the troubled soul finds some better means of assuagement than inflicting injury upon the body, when the beauty of a harmonious whole is the ideal.

To attain this ideal it would be necessary to move the Medical School out of London. A site by a river is one to be preferred, since rowing and swimming are among the finest and purest of sports. Whether a river would also meet the needs of those who are devoted to sailing they themselves may tell. Communion with nature is essential, even though truly unspoilt nature is now almost out of reach, for the art of living cannot be learnt without it. The spade and the hoe must not be forgotten, for they furnish another way. During the late war, when the School had moved out to Pembury, residence in the country was seriously discussed ; but the proposal was rejected on the ground, I am told, that those who taught would be too far removed from the headquarters of a university. There is substance in this objection, even though the site need not be so inaccessible as Pembury ; but we have to lay against it that excessive urbanizing that is proving the bane of our civilisation today and is a main source of many of our ills, as wise men are coming to see. Such values are imponderable and their respective merits must be matters of opinion. On the one hand there is for the staff the facility in reaching scientific meetings, large libraries and committees, on the other hand for the students the athletic-intellectual ideal, removal from the grime, the ugliness, the harsh speech, the sharp manner and the commercial standards of the city and in their stead whatever benefits Nature can bestow. There is, however, another objection that seems to me more weighty than this, and that is that a college would have to be built. To do this at the present time would be impossible, but we are not to be debarred thereby from thinking of the future.

A similar project to move some of the clinical part of the hospital into purer air and better surroundings, to the benefit not only of the student but also of the patient and the nurse, has met with such a conservative response that I judge it has never been formulated. The " snow-crystal " is about to arise, not an " exquisite little crystal "—(Huxley) but a very large structure, and not rightly called a " snow-*flake*," which is usually " made up of several crystals." This part of the subject, therefore, need not be pursued.

Venit summa dies et ineluctabile tempus !

To the Medical School there would be some compensating advantage here in that neither the mileage of ambulances nor the proximity of Harley Street would have to be considered in choosing a site ; and I think I know the land in which that site might be.

How pleasant it is in this dry, warm pasture, where the salad burnet grows amid the shining grasses ! Below me yonder is the curved line of dark green that marks the river's course ; and from where the trees are thickest I can hear the roar of the lasher coming up. Go past those seething waters and there, a few yards below, is just the spot for youth to plunge in and enjoy an invigorating swim. Methinks I hear the click of oars, as the button turns against the pin, the swish of the blades and the exhortations of the coach.

Tollunt in numerum fera bracchia, vique feruntur

Per fluctus ; sonuere viae clamore secundo.

An admirable parodist was Calverley ! But heavens ! why do I think of buttons and tholes ? Of course they will be using swivel-rowlocks now. And just there is a meadow with its rich pattern of crimson clover and golden trefoils, but now appearing instead to the mind's eye shorn and smooth as a billiard-table ; and from it comes another sound, not less pleasing to English ears than the pulse of oars, the musical note that the willow gives forth when the bat fairly meets the ball.

Behind me rise the wooded hills and in their shy recesses hides many a rare and curious plant, for as yet they have been but little profaned by the urban multitude. Those henceforward who will seek these treasures will have a proper reverence : they will go out not as ravishers of Nature but as her wooers. Here and there will be someone who can afford a ride.

Loveliest of trees, the cherry now
Is hung with bloom along the bough,
And stands about the woodland ride
Wearing white for Eastertide.

But it is winter and the muddied teams have left the field. After a bath and mountainous tea, with what zest will they dissect the green gland of *Astacus* or prepare the crystals of cholesterol from a sheep's brain ! Then to the spicy nut-brown ale, " the long tables, the faces merry and keen," " the dons on their dais serene," who appear to be simply Professor S., Professor W., Professor H. and other owners of well-known faces. The nights, too, hold out their allurements, music and literature, oratory and the arts, or questions to be asked and answered such as Plato never knew. Thus unrolls itself for the student at some future time a finer grace and a fuller life.

Medicine is today confronted with some serious problems, one among which is how to prevent the physician and surgeon of the future from losing his estate as a man of wisdom and a man of learning, who unites in himself the artist with the scientist, and from sinking to the level of the technical expert, or, to put it in another way, how to ensure that neither he nor his teachers shall suppose that his education is a training for a *job*, a word far too often heard in hospitals today. There are, too, several reasons for thinking that this danger is likely to be more imminent in the future even than now. There is no saying, then, what steps our Medical School might not take at some future time in its efforts to counteract this and other bad tendencies and to present the student with the best education in its power. Already its policy is more enlightened than that of Oxford or Cambridge : what bright future might not such a body have in store ? It comes to this, that one day student and teacher may enjoy as a real benefit what I can only forecast in a sketch, fugacious as the petals of the cistus. The Cumæan Sybil let her leaves be scattered by the winds, and some thought her strange : yet the Trojans reached Latium and in due time Rome was built.

Guy's Hospital Rugby Football Club

The 108th season of Guy's Hospital Rugby Football Club opens on Saturday, 15th September, 1951, at Honor Oak Park.

Light training in preparation for the coming season will commence on Wednesday, 22nd August, leading up to full scale practice on Wednesday, 5th September. All training will be carried out at Honor Oak Park.

OFFICERS

Captain : C. W. Pook.
Honorary Secretary : E. O. James.
Assistant Honorary Secretary : K. P. Walker.

FIXTURES, 1951–52

	FIRST XV.		"A" XV.	
DATE	GROUND	OPPONENTS	GROUND	OPPONENTS
1951.				
Sept. 15	H.O.P.	Catford Bridge	H.O.P.	Catford Bridge "A"
,, 22	H.O.P.	Blackheath	H.O.P.	Blackheath "A"
,, 29	H.O.P.	Old Whitgiftians	Rochester	Rochester
Oct. 6	Portsmouth	United Services (Portsmouth)	H.O.P.	United Services "A" (Portsmouth)
,, 13	H.O.P.	Aberavon	Chatham	United Services (Chatham)
,, 20	H.O.P.	Bedford	Bedford	Bedford Wanderers
,, 27	Plymouth	Plymouth Albion	H.O.P.	Shelford
,, 29	*Paignton*	*Paignton*	—	—
Nov. 3	H.O.P.	Old Blues	Fairlop	Old Blues "A"
,, 10	Birkenhead	Birkenhead Park	—	—
,, 10	Twickenham	London Counties *v.* South Africa	Twickenham	London Counties *v.* South Africa
,, 14	H.O.P.	Cambridge University	—	—
,, 17	H.O.P.	Rosslyn Park	Richmond	Rosslyn Park "A"
,, 24	Blackheath	London Irish	H.O.P.	London Irish "A"
,, 28	Motspur Park	London University	—	—
Dec. 1	H.O.P.	Coventry	Coventry	Coventry Ex. 1st
,, 8	Thames Ditton	Old Cranleighans	H.O.P.	Lewes
,, 15	Moseley	Moseley	H.O.P.	Norwich
,, 22	—	—	—	—
,, 29	Headstone Lane	Old Millhillians	—	—
1952.				
Jan. 5	H.O.P.	Old Merchant Taylors	—	—
,, 5	Twickenham	England *v.* South Africa	Twickenham	England *v.* South Africa
,, 12	H.O.P.	Wasps	Sudbury	Wasps "A"
,, 19	Twickenham	England *v.* Wales	Twickenham	England *v.* Wales
,, 26	H.O.P.	Devonport Services	Norwich	Norwich
Feb. 2	Coventry	Coventry	H.O.P.	Coventry Ex. 1st
,, 9	Twickenham	England *v.* Ireland	Twickenham	England *v.* Ireland
,, 13	—	—	Cambridge	St. John's College
,, 16	Aberavon	Aberavon	H.O.P.	Stoneygate
,, 23	H.O.P.	Metropolitan Police	H.O.P.	Metropolitan Police "A"
Mch. 1	Herne Hill	London Welsh	H.O.P.	London Welsh "A"
,, 8	*Llanelly*	*Llanelly*	*H.O.P.*	Gidea Park
,, 15	H.O.P.	Gloucester	—	—
,, 15	Murrayfield	England *v.* Scotland	Murrayfield	England *v.* Scotland
,, 22	H.O.P.	Old Paulines	—	—
,, 29	H.O.P.	Exeter	—	—
Apl. 5	H.O.P.	Richmond	—	—

Daily Visiting in Children's Wards

By M. A. DUNCOMBE, S.R.N., R.S.C.N., S.C.M.
Sister-in-Charge, Children's Department, Guy's Hospital

THE nursing profession has been challenged but has not accepted the challenge. This surely is an unusual situation and few of us normally refuse to try what may seem impossible, when there is hope of a way out. I am referring to the vexed problem of daily visiting in children's wards, and I feel qualified to do so, for I have experience of allowing no visiting, visiting once, then twice a week and for the past three years daily visiting for all children.

I am convinced that daily visiting is the only right way. Psychologists who are better qualified than myself to speak about the deep effect of separation of mother and child in early life, have said and written much on the subject, but my colleagues and I look at the matter from a practical point of view. Here are the answers to the arguments against daily visiting which I hear again and again both in personal conversation and at professional meetings. I often feel amazed and ashamed that when I speak in favour of daily visiting in public members of the audience never fail to express surprise, that I—a children's ward sister—should be enthusiastic about it. Let us then examine the questions and arguments raised one by one.

Has there been an increase of cross infection due to daily visiting ?

Emphatically, no. Though we have kept no statistics, it is the general impression of those concerned that there has not been an increased incidence of cross infection. The happy child seems to be less susceptible than the unhappy one. Again in most instances, particularly in teaching hospitals, innumerable people enter the wards and are in contact with the children every day. Are fathers and mothers an unreasonable addition to their numbers ?

How can this additional burden be taken on when we are so short of staff ?

The smaller the number of nurses, the greater the benefit to the ward sister. If every ward chose the time best suited to the daily routine, the parents could take for one half hour a day the place of all the staff except the sister, who as a matter of course remains in the ward to see the visitors and can deal with any emergency that might arise. In my particular department the nurses go to their evening meal during visiting time and the full number return to duty as the visitors leave. They can then occupy the children and are able, in maximum numbers, to continue with the routine work as they return on duty. Many nurses have a friendly talk with their patients' parents and in that way learn many little, but important things, about their charges.

How does daily visiting affect the already hard pressed ward sister ?

It cuts down her work because all the usual enquiries are concentrated into one planned half hour a day. Much more can be said and explained in conversation with parents than over the telephone. Parents understand better information given in this way and daily visiting and closer personal contact shows them the friendliness and helpful atmosphere that prevails in most children's wards. There is endless opportunity for teaching and guidance resulting in a far more confident mother taking her child home to spend convalescence with the family, rather than in hospital or convalescent home.

Is it not particularly difficult to make time for daily visiting in hospitals which are also training schools ?

This is not so. Both medical students and nurses have a splendid opportunity of getting to know their patients' parents, of talking to them and thus gradually learning the art of dealing with relatives. They get an insight into their patients' social background which adds to the interest and efficiency of their work and training.

Is not the trauma of repeated separation harmful to the child ?

Even the youngest toddler learns very rapidly that " mother will be back tomorrow ". There is very little crying following visiting time and even when there is, this superficial manifestation of sorrow is surely far less damaging than quiet, deep-seated grief. If daily visiting is supposed to be harmful on this account, how can we explain and justify the general practice of allowing unrestricted visiting at the bedside of the most seriously ill children—an arrangement that applies to all types of hospitals throughout the country.

Is there any proof that daily visiting is of advantage to the child ?

Not at present statistically. But does it not count as proof to see time and again children readmitted at a later date obviously quite happy at returning to the ward. After discharge, mothers tell neighbours, health visitors, almoners and the pædiatrician in the out-patients' department how much they appreciate daily visiting and their children seem unchanged and present no special behaviour or emotional problems on returning from hospital. To see a mother's face light up when given her card with the visiting times is proof—and reward—in itself.

Should a child be allowed to settle down for a few days ?

A most important point which should not be missed, is that the *first* days of separation are the most trying and harmful to the child. Mothers sometimes have to be encouraged to visit on the first evening following admission as they fear the child may cry when they leave. They usually follow my suggestion to come and see for themselves and to my knowledge none have regretted doing so.

Why has the late hour of 6.0—7 p.m. been found most satisfactory ?

Apart from the consideration already mentioned, it is a time any child can readily understand and look forward to. It is " just after supper time " and " just before tucking down time ". Mother also gets the chance of putting other children of the family to bed or placing them in the care of a kindly neighbour, and giving father his meal when he comes home from work, before they both set out together, to visit their child in hospital.

Here, then, are a series of arguments in favour of daily visiting, which may make the visualised difficulties seem less insurmountable. No one will deny that mother and child belong together—in sickness and pain probably more than ever—and all of us will know of examples when the mother's presence has made all the difference to the child's recovery. For any child who takes illness as a punishment, being in hospital may made him doubt whether he really is wanted and loved at home and thus the seed of later deep-rooted troubles are sown. The daily visit, with its opportunity to give love and reassurance of a kind not in the power of any but the mother to give, will do much to prevent such feelings of insecurity, and the medical and nursing staff will find they have been more than repaid for the small trouble of making suitable arrangements by the contentment and gratitude of their little patients and their parents.

Public opinion is pressing for facilities for daily visiting, the Ministry of Health has already circulated a memorandum advocating it and hospitals have the full support of almoners, teachers, psychologists and the Association of Sick Children's Hospital Nurses. May the nursing profession take up the challenge and itself show the way to a more sympathetic and wider conception of its duty to the mother and her sick child.

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Hospital Information, etc.

APPOINTMENTS VACANT

Applications are invited for a full-time **Research Fellowship in the Thoracic Surgical Unit** for research on cardiovascular problems commencing on 1st October, 1951. It is desirable that applicants should possess a higher qualification in Surgery. Salary will depend upon the experience of the person appointed. Applications, with the names of three referees, should be sent to the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, not later than the **1st September, 1951.**

APPOINTMENTS

GUY'S HOSPITAL

JUNIOR STAFF, 1951–52

The following appointments and reappointments to the Junior Staff for the period commencing October 1st, 1951, have been made by the Board of Governors. Other appointments will be announced as soon as possible :—

Whole-Time Appointments

Medical Registrars :
Batty Shaw, A.
Finnegan, T. R. L.
Irvine, R. E.
Thorne, M. G.

Junior Medical Registrars :
Baylis, J. H.
Scott, G. W.
Symonds, W. J. C.
Surgical Registrars :
Lane Roberts, P. A.
Large, P. G.
Tibbs, D. J.
Ticehurst, R. N.
Obstetric Registrars :
Evans, G. M.
Hammond, G. T.
Genito-Urinary Registrar :
Guerrier, H. P.
Orthopædic Registrar :
Addison, J. R.
Anæsthetic Registrars :
Carnegie, D. M.
Davies, D. G. H.
Chief Assistant, Clinical Pathology :
Stephens, B. J.
Assistant Clinical Pathologistsl:
Brunsdon, D. F. V.
Greenburgh, H.
Turk, D. C.
Hæmotological Registrar :
Stoddart, F. G.
Chief Assistant, Neurology :
Mackenzie, I. C. K.
Neurology Registrar :
Gordon, J. V.
Assistant to Director of York Clinic :
Crawford, J. P.
Psychological Medicine Registrar :
Dobson, J. R. E.
Neurosurgical Unit Registrar :
Dinning, T. A. R.
Radiotherapy Registrar :
McArthur, J. M.
Throat and Ear Registrars :
Jenkins, J. T. M. C.
Trethowan, J. D.
Chief Assistants, Diagnostic Radiology :
Cole, W. R.
Thomson, W. N.
Diagnostic Radiology Registrar :
Medill, E. V.
Physiotherapy Registrar :
Fulton, J. B.
Skin Registrar :
Montgomery, P. R.
Children's Registrar :
Vulliamy, D. G.

EVELINA HOSPITAL

Medical Registrar :
Trounce, D. Q.

Part-Time Appointments

Medical Officers, V.D. Dept. :
Evered, L. J.
Halstead, Miss J.
Ophthalmic Registrars :
Bain, W. E. S.
Blaxter, P. L.
Cook, C. A. G.
Munro, S. S. F.
Throat and Ear Registrar :
Salmon, L. F. W.
Chief Assistant, Psychological Medicine :
O'Neill, D.
Psychological Medicine Registrars :
Clark, A. S.
Davys, M. G. D.
Haffner, C.
B.M.R. and Endocrine Dept. Registrar :
De Mowbray, R. R.
Skin Registrar :
Pegum, J. S.

Junior Dental Staff Appointments

Dental Officer, Salomon's Centre :
Loader, G. S.
Orthodontic Assistants :
Harvey, P. D.
Rose, J. S.
Swift, P. A.
Preventive Dentistry Registrars :
Fooks, A. A. W.
Pett, B. W.
Assistants to Director of Conservation Room :
Feaver, R. E.
Robinson, A. A.
Robinson, A. D.
Rowe, A. H. R.
Conservation Room Registrars :
Cook, D. F. L.
Grimer, P. T.
Hagger, C. I.
Hancock, J. G.
Hart, R. J.
McKie, N. S.
McLean, J. W.
Sunaway, K. S.
Assistant, Dept. of Extractions and Minor Oral Surgery :
Bridge, A. J.
Assistants to Director of Dental Prosthetics :
Ferrari, A.
Morris, P. B.
Mechanics and Prosthetics Registrars :
Gain, R. D. G.
Malleson, M.
Rand, A.
Stileman, R. D. W.
Dental Dept. for Children Registrars :
Campbell, A. C.
Kettle, M. A.
Richards, H.

Assistant Clinical Pathologist (Dental) :
Shuttleworth, C. W. T.

Dental Casualty Registrars :
Rotherham, W.
Thompson, G. F.

Dental Officer to Nursing Staff :
Hancock, T. J.

GUY'S HOSPITAL MEDICAL SCHOOL

The following appointments to the Junior Staff were made for the session 1951/52 :—

Junior Assistant to the Director of the Department of Medicine :
C. L. Joiner—re-appointed for one year from 1st October, 1951.

Tutor in Charge of the Preliminary Clinical Period Class :
J. C. Houston—re-appointed for one year from 1st October, 1951.

Assistant to the Director of the Student Health Service :
R. R. de Mowbray—re-appointed for one year from 1st October, 1951.

Junior Assistant to the Director of the Department of Surgery :
J. G. Stebbing re-appointed for one year from 1st October, 1951.

Lecturer in Physiology :
D. J. Anderson—re-appointed for two years from 1st October, 1951.

Junior Lecturer in Physiology :
I. Macdonald—re-appointed for one year from 1st October, 1951.
A. F. Ross—re-appointed for one year from 1st October, 1951.

Junior Lecturer in Anatomy :
F. G. Ellis—appointed for one year from 1st October, 1951.
O. L. Thomas—re-appointed for one year from 1st October, 1951.
N. Thompson—re-appointed for one year from 1st October, 1951.
A. W. R. Williamson—appointed for one year from 1st October, 1951.

Junior Lecturer in Anatomy (part-time) :
P. C. Grummitt—re-appointed for one year from 1st October, 1951.

Junior Lecturer in Physics :
I. G. Austin—appointed for two years from 1st October, 1951.

Lecturer in the Biochemistry and Chemistry Department :
R. J. Bridgwater—appointed for two years from 1st October, 1951.

Junior Lecturer in Bacteriology :
M. B. King—re-appointed for one year from 1st October, 1951.
K. F. Anderson—re-appointed for one year from 1st October, 1951.

Junior Lecturer in Pharmacology :
R. Goulding—appointed for two years from 1st October, 1951.

Lecturer in Chemical Pathology :
R. W. R. Baker—re-appointed for two years from 1st October, 1951.

Junior Lecturer in Chemical Pathology :
C. J. Earl—re-appointed for one year from 1st October, 1951.
A. Tickner—re-appointed for one year from 1st October, 1951.

Junior Lecturer in Morbid Anatomy and Histology :
J. B. Enticknap—appointed for one year from 1st October, 1951.
D. A. Osborn—re-appointed for one year from 1st October, 1951.

Gull Student in Pathology :
E. A. Wright—for one year from 1st October, 1951.

PASS LIST

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.
Final Examination
June, 1951

E. M. Bearn
A. J. Bligh
R. E. Collinson
R. J. G. Day
J. G. G. Dixon
S. S. R. Earl
D. London
N. J. Mayson
R. V. S. Muscat
R. F. Poole
N. E. Price
W. D. V. Ryan
I. I. Singer
T. M. Smith
J. J. F. Staub
C. A. P. Steele
J. Stott
J. S. Tisdall
E. Tweddle
J. C. Walby
A. V. Westlake
W. C. Whaites
A. H. Whitaker
W. J. P. Wilkie

CONJOINT BOARD

June, 1951
Elementary Biology
N. R. Cooke

ROYAL COLLEGE OF SURGEONS OF ENGLAND

June, 1951
F.D.S.
A. J. Clegg
H. S. M. Crabb

L.D.S.
First Examination
July, 1951

Anatomy and Physiology
B. H. Allen
H. F. A. Baker
G. H. G. Bradley
A. R. F. Segerdal

Special Anatomy and Physiology
B. H. Allen
H. F. A. Baker
A. J. Bowman
A. D. Forman
K. M. Frew
W. Goriah
J. B. Gray
D. A. Hopkins
E. O. James
J. C. Kingston
J. Metcalf
T. A. J. Ogunbiyi
Dorothea Street

UNIVERSITY OF LONDON

June, 1951

Academic Postgraduate Diploma in Bacteriology
C. C. Spicer

Academic Postgraduate Diploma in Public Health
G. M. Curtois
L. E. A. Dearberg
D. H. MacKay

Academic Postgraduate Diploma in Medical Radiology (Diagnosis)
July, 1951
G. F. Swann

ROYAL COLLEGE OF SURGEONS OF ENGLAND

COUNCIL

The following have been co-opted to the Council for the year 1950–1951 representing the branches of practice indicated in parentheses :

Mr. A. D. Marston (Anæsthetics), Sir William Kelsey Fry (Dental Surgery).

LECTURERS

The following Lecturers have been appointed for the ensuing year :

Hunterian Professor : Mr. S. M. Cohen. Peripheral Aneurysm and Arteriovenous Fistula.

Arris & Gale Lecturers : Mr. A. R. Clarke. Prevention of Shock and Anæmia in Trauma. Dr. J. N. Hunt. Human Gastric Function.

AWARD

LEGION OF MERIT

The President of the United States has conferred the decoration of Legion of Merit, Degree of Officer, upon Lieut.-Colonel G. T. Hankey, O.B.E., T.D., R.A.M.C., in recognition of distinguished service in the cause of the Allies during the 1939–1945 war.

CHANGES OF ADDRESS

P. H. Bright, M.B., B.Ch., "Fernclyffe," Cleeve Hill, Nr. Cheltenham, Glos.

Miss T. Dartnall, 680, Blundell Road, Steveston R.R., Lulu Island, Vancouver, British Columbia, Canada.

G. R. W. N. Luntz, M.R.C.P., Romsley Hill Sanatorium, Romsley, Halesowen, Nr. Birmingham, Worcs. Tel. : Romsley 311.

BIRTHS

CROOK.—On July 18th, 1951, at Victoria Ward, Guy's Hospital, to Ruth (née Bellamy), wife of Capt. J. C. Crook, R.A.M.C.—a daughter (Rosemary Anne).

DREWITT.—On June 17th, 1951, to Kathleen (née Blair), wife of Alfred H. Drewitt, M.R.C.S., L.R.C.P.—a son (Paul Alfred Blair).

LAWS.—On July 4th, 1951, at Farnborough Hospital, to Sheila (née Squire), wife of John O. Laws, M.R.C.P., of the Pathology Dept., Guy's Hospital, and 6, Oakdene Road, Sevenoaks, Kent—a daughter (Julia Susan).

SOUTHWELL.—On July 12th, 1951, to Betty, wife of Beric Southwell, L.D.S., R.C.S.—a sister for Diana.

WILLCOCK.—On July 26th, 1951, to Jennifer (née Crosland), and Roger D. Willcock, M.B., B.S., of "Homeville," Bignall End, Stoke-on-Trent — a second son (Peter Doidge), a brother for Alan.

MARRIAGE

BLYTH—ANDERSON.—On July 21st, 1951, at St. Andrew's, Kingswood, Surrey, Arthur Graham Blyth, M.B., B.S., M.R.C.S., L.R.C.P., to Jean Drysdale Anderson.

DEATH

MEADOWS-RYLEY.—On July 24th, 1951, suddenly, whilst on holiday, Charles Meadows-Ryley, M.B.(Camb.), B.Ch., of 40, Bromley Road, Beckenham, Kent, and 56, Wimpole Street, London, W.1.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1646 25*th August* 1951 *Ninepence*

PASSIM

SINCE the National Health Act came into force much has been written about the position of doctors and dentists in the Health Service ; much, too, about their position on the various Boards of Governors, Regional Hospital Boards, Hospital Management Committees, and Executive Councils. A good deal less, however, has been said about the new position occupied on these Committees by the lay members of the public. The latter have grown in numbers and in influence. They are drawn from widely differing sections of the public. For the most part the relationship between the medical profession and these lay representatives has been a happy one but it must be recognised that both the position of the doctor who used to have great influence in running a voluntary or an aided hospital and that of the influential layman, who so often rendered invaluable services in administration and in raising funds, has changed. Their new relationship to one another and the Hospitals they serve are undergoing a considerable and not always smooth change. Yet upon the success with which they share their new trust depends much of the success of the Health Service. It would perhaps be true to say that whereas the doctor has lost ground in control of his own hospital, the layman has gained. The doctor, whatever he may feel about the Health Service generally, has a natural reluctance to acknowledge a new superior authority in the administration of his own hospital—his regret admixed with a trace of resentment is as natural as the sturdy independence from which it comes. Particularly does he feel that doctors are at least as aware as layfolk of the public need—does he not live amongst them, attend their needs and hear their views on medical and hospital matters at least as closely as the most public spirited layman ? His profession does not remove his citizenship. Why, then, impose upon him committees loaded with layfolk—whose knowledge, however great their interest, cannot be as profound as his own. If the layman is wise he will appreciate and not resent such sentiments. But laymen, like doctors, are not always wise: Why should the medical profession exercise monopoly over Hospital and Health Service administration ? Are the sick not the very people who most need lay representation on these boards of management ? Are there not many views and needs of the general public better known and appreciated by non-professional persons ? On matters of policy—the distribution of hospitals and services, etc.—ought not, as a natural democratic right, the layman as well as the professional man to be empowered to air his views and cast his vote ? . . . and the doctor, if he is wise, will respect such views.

Perhaps, here at Guy's, where our traditions are so strong that minor personal differences can be contained, we are unaware of any opposition of these two views. May it always be so. But there are other towns and districts where relationships are less happy, where from motives which are not always so public spirited as their initiators may think, proposals, far reaching and sometimes damaging to the traditions of other hospitals are made and insisted upon by lay members of the public. The result is that before the public are aware of the true issues politics pushes its ugly contemptible head into the realm of the healing of the sick. And in the medical profession there are also that conservative rearguard—to be found in any profession—who will oppose most changes. There are on one hand those who, as Macaulay says, believe that all changes are for the good and there are those who believe that there is no good in any change.

It is our view that any doctor and any layman who accepts a post on a Board holds a trust to serve the public he represents as best he can. The Health Services are run neither for the doctor or dentist or nurse nor for the lay members of Hospital Committees. They are for the sick and if anyone for reasons not of the most strictly disinterested nature find himself at variance with his colleagues then his differences should be composed before they are made public—or he should withdraw.

In conclusion we cannot but help drawing an analogy between this situation and that of a wartime government and its professional soldiers : Differences ought to be composed in private and not brawled about in public. Though both may disagree from the highest motives the results of their public disagreement may well entail, not only loss of efficiency and loss of public confidence but, in the end, loss of life as well.

We greatly regret to record the death of George Dunluce Eccles, M.B.E., M.C., M.B., B.S., M.R.C.O.G., M.M.S.A., Deputy Superintendent of St. Olave's Hospital. He died on the same day as his old friend Dr. Meadows-Ryley whose obituary appeared in our last issue.

We offer our warmest congratualtions to Mr. E. B. Dowsett who has recently been made President of the British Dental Association. That this honour should have fallen to a Guy's man will be an additional source of pleasure to Mr. Dowsett's many friends at Guy's.

RETIREMENT

DR. W. J. R. CALVERT

His many friends will learn with regret of the impending retirement of Dr. Calvert, Senior Lecturer in Physics, who, before coming to Guy's in October, 1945, had done notable service at the Royal Aircraft Establishment, Farnborough, during the Second World War, and prior to that had been for many years responsible for the teaching of Physics at Harrow School. Dr. Calvert has become well known in Guy's for his quiet efficiency, enthusiasm, selfless devotion to his students, and, above all, for his human qualities and personal charm.

It is hoped that Dr. and Mrs. Calvert will be present for tea in the Physics Department on Tuesday, September 25th. Any Guy's men and women, whether members of the staff or former pupils, who would like to meet them, will be cordially welcomed, but it would be appreciated if they would notify me beforehand, so that the necessary arrangements can be made. G. STEAD.

CORRECTION

In our last edition the article on " Daily Visiting in Children's Ward " gave the time of daily visiting at Guy's as 6—7 p.m. This should have read 6.30—7.0 p.m.

Obituary

GEORGE DUNLUCE ECCLES, M.B.E., M.C., M.B., B.S., M.R.C.O.G., M.M.S.A.

WHEN G.D., as he has been known to his many friends, entered Guy's in 1907 it was at once obvious to all concerned that he was a man of quite remarkable capabilities. Had he elected to follow the orthodox channels, he would have reached the height of eminence in the medical profession. But he had wider interests : the straight and narrow path did not appeal to him. Possibly a too strict upbringing during his early life in Plymouth caused him to reach towards the Bohemian trends of the good Edwardian days. Nevertheless his intellectual and athletic attainments placed him in the highest category of a particularly brilliant group of men who were at Guy's in his time.

His outstanding characteristics were, and always have been, courage and generous hospitality. Although intolerant of humbug he had a genuine affection for his fellow men and women. During the early part of the first World War he was awarded the Military Cross at a time when that decoration was practically the equivalent of the V.C. It was his proud boast that a well laced mixture of rum and milk was ever available to all comers, from Brigadier to private soldier, at his Regimental Aid Post in the Flanders trenches. He subsequently served in Mesopotamia.

After that war he became Deputy Medical Superintendent to our neighbouring hospital which was subsequently named St. Olave's ; and for many years he was also in charge of the Obstetric Department. He was one of the first men to take the Mastership of Midwifery of the Society of Apothecaries ; he was a Founder Member of the Royal College of Obstetricians and Gynæcologists.

During the second World War his prevailing courage, administrative ability and good cheer were again manifest at St. Olave's and elsewhere in the South East of London throughout the original blitz and the bombing of later years. He was awarded the M.B.E. in recognition of his services.

Quite apart from his versatility, he was a man of culture and considerable erudition. He was an excellent judge of modern literature ; on the other hand he could quote long passages from the Bible with accuracy and aptitude.

To those of his friends who had the privilege of meeting him during the latter days of a distressing illness, his undaunted courage, his good fellowship and his courtesy were a source of inspiration—to the very end of his life on this earth.

MRS. J. R. B. HEARN

I SHOULD like to be allowed to pay a tribute to the work done by Mrs. J. R. B. Hearn when she was a Sister in the accident ward at Guy's Hospital. after the First Great War. The male urological beds were situated in this ward and she was also responsible for many other special cases. Mrs. Hearn, then Miss Cornwall, was a really excellent Sister and looked after all my patients most assiduously and gently. I owe her much for the knowledge she instilled into me.

With Mrs. Hearn as Sister it fell to my good fortune to have as head nurse a lady who became Mrs. Maurice Campbell. Two such nurses I believe a surgeon at Guy's never had as these two were. Mrs. Hearn was a very good tennis player and was, I think, champion of the nurses for several years.

Thus she bore in mind " Mens sana in corpore sano." Not only had Mrs. Hearn a healthy mind but she was a woman of great ability. She was one of the best Sisters the Urological Department ever had.

It is hard to realise that Mrs. Hearn is dead as she had always such a living influence and it is difficult to express in words what the Urological Department owe to her.

A.R.T.

"A Case from the Past"

[*The following is a reprint from the Minutes of the Physical Society.*]

PUBLIC MINUTES

At The 5th Meeting of the 33rd Session Nov. 12 1803.

DR. HAIGHTON IN THE CHAIR.

MR. PRIOR read the following case—On Tuesday Oct. 25 I was called to a woman in labour—I found her under the following circumstances—her name was Sarah Glenek a young woman apparently of a strong robust constitution advanced between 8 and 9 months in her pregnancy—her labour had commenced on the Sunday previous proceeding with regular and strong pains during the whole of the day—at night the Os Uteri being fully dilated the Membranes gave way and a very large quantity of water was discharged—from that time the pains subsided and did not return until the next evening when they recommenced with great force—the Midwife who had attended her from the first was again sent for and was attempting the delivery of the child until three o'clock the following morning when finding her attempts fruitless she sent for me—upon examination I found the Pelvis of the proper size the whole of the parts sufficiently dilated and the right shoulder of the child presenting with the arm in the vagina—this I at first returned but in a short time it again descended and finding no inconvenience arise from its situation I did not think it necessary to repeat the reduction—after proper preparation I introduced my hand into the Uterus in order to gain the feet of the child but this attempt was completely frustrated, the contraction was so great had been so long continued and in consequence had so accommodated itself to the shape of the child that I could not make any useful progress—mistrustful of my own correctness and unwilling to take upon me the whole responsibility of so unpleasant a case I sent for my father—upon his arrival he alternated with me in similar efforts to those before mentioned but we were much disappointed to find them all equally fruitless—under these circumstances I sent about 3 in the morning to Dr. Walsham—as the woman had undergone great exertions I thought it prudent to let her now have some rest and gave her xxx drops T-Opii hoping to remove or alleviate the spasm—about 10 the Dr. arrived and the attempts to turn were again thought advisable and were tried with as much force and perseverance as prudence would admit of—however notwithstanding these and the dose of opium being repeated from time to time the contraction continued so forcible that all attempts to counteract them were unavailing—the case seemed now allmost desperate and I was left with the woman impressed with the idea that she might very probably die undelivered or that parturition would be effected more with the hope of saving in some degree the credit of the profession than of preserving the life of the patient—about this time the contractions increased to so great an extent as to occasion the most violent pains that human nature could support, her stomach partaking of the irritation of the system would no longer retain the smallest substance, she became delirious with strong general convulsions during the intervals of pain in a state of exhaustion with a sinking pulse *subrultus tendinum* and picking of the bed cloaths—the inferences from this state seemed obvious but her resources were great and unexpected—the feet of the child were evidently placed at the fundus uteri and all attempts to gain them being useless I thought it proper to assist the natural efforts—these were violent to a degree allmost exceeding credibility and continued till near 4 in the afternoon when the child was gradually expelled in the same direction in which it had presented—the head and the body passing thro' the Pelvis at the same time—It is allmost needless to add that the infant was quite dead—it was rather under the common size but not particularly small—the placenta followed allmost immediately and no Hæm. supervened—After a proper time she was placed in bed—the external parts being very considerably tumefied were fomented and a large poultice applied extending over the lower parts of the abdomen—she took a saline mixture with newtræ salts and T-Opii since that time the external swelling has gradually subsided there has never been any fixed pain denoting abdominal inflamn. The pulse have never at any time exceeded 93 and since the second day have seldom exceeded 80—she has had no rigors no improper heat or thirst her tongue has been uniformly clean and moist and she is at this time not yet 3 weeks from her delivery sitting up nearly the whole of the day much stronger than many women at the same period who may have been delivered under the most favourable circumstances—

The reading of Mr. Fothergill's and the discussion of Mr. Travers's papers were continued.

Adjourn'd
GEO. JOHNSON
Secry.

Tennis Club

Guy's VI *v.* Mr. Blackburn's VI

Result—Lost 5—4

At H.O.P., on Sunday, July 29th, the Tennis Club held an annual social occasion when the 1st VI played the Residents' VI.

With great humility we have to record that the Hospital lost by 5 matches to 4, but this in no way detracts from a fine afternoon which was enjoyed by everyone present.

Mr. Blackburn, the Club's President, had maintained a great secrecy about the strength and personalities of his team, and his shock tactics claimed the day.

Certainly his team showed good form although one member protested that he was not at his best because his favourite tennis hat had been accidentally laundered and had shrunk, and another confessed to having relaxed training too heartily over Sunday lunch. However, the tennis was keen and of a good standard.

We were all extremely pleased that Professor T. B. Johnston was able to be present. For many years he was closely associated with the Tennis Club and fielded his VI for this annual match. Although on this occasion he did not wield a racket his good advice spurred on the President and his men in their moments of stress, and when the winning hit was made he rendered a fine victory tune on the horn of his motor car.

We sincerely hope that this fixture will long remain a permanent item in the calendar of the Tennis Club.

The results of the individual matches were as follows :—

Mr. G. Blackburn and Mr. P. Dwyer
Beat C. H. Opie and K. Thomas
Lost to E. G. Searle and J. A. Bullard
Beat B. Piggott and M. Anderson

Dr. R. S. Bruce Pearson and Dr. K. M. S. Hume
Beat C. H. Opie and K. Thomas
Lost to E. G. Searle and J. A. Bullard
Beat B. Piggott and M. Anderson

Mr. J. B. Blaikley and Dr. S. A. Marsh
Lost to C. H. Opie and K. Thomas
Lost to E. G. Searle and J. A. Bullard
Beat B. Piggott and M. Anderson

CLUBS' UNION COUNCIL

A meeting took place of the Clubs' Union Council on July 20th. Amongst the matters discussed were the Students' Union Ball to be held in January next year. It is hoped to make public the arrangements for this Ball before very long. Various points arose in connection with Honor Oak Park Sports Ground. It was decided that the charge for teas should be increased from 1*s*. 3*d*. to 1*s*. 6*d*. It was further decided that during August and the early part of September when Mr. and Mrs. Kirby are away, the bar, hot water and ground facilities (tennis and cricket) should be made still available to members, but that the provision of teas should be temporarily discontinued during their absence. Other matters decided upon were the inclusion of the Judo Club and the Chess Club in the Clubs' Union.

Correspondence

Dental Delight

SIR,—As a Guy's Dental, may I ask for space to quote from " Othello " ?

. . . " But he that filches from me my good name
Robs me of that which not enriches him
And makes me poor indeed."

May I also hope that if the articles proposed by Peter J. Hill are published one might be entitled, " The Dental Point of View " ?

Yours, etc.,

E. BRODIE CARPENTER.

Review

A Text Book of Medicine. Edited by E. NOBLE CHAMBERLAIN. Wright. *Price* 50*s*.

The appearance of a new textbook of medicine is something of an event. This book is most attractively got up and contains 266 illustrations, most of them of high quality and many in colour. More than half the contributors come from Liverpool and four are professors of medicine. The standard of writing is high, and there is a praiseworthy attempt to emphasise the commoner conditions. The section on diseases of the chest by Dr. F. H. Young is particularly good. A novel feature is quite a long chapter on industrial toxicology. There is no section on skin diseases. The hæmatological chapter is probably in advance of its time. It is confusing to the student to read of blood diseases in terms of the mean cell volume and mean corpuscular hæmoglobin concentration when the terms he hears every day such as colour index and mean cell diameter are not even mentioned.

It is difficult to see what place this book will take. Its pages are certainly attractive to the eye, but it is expensive, and apart from its illustrations it offers the student nothing which he cannot already get from Sir John Conybeare's Textbook of Medicine in about the same compass and at little more than half the cost.

R.E.I.

August		**ACADEMIC**
31st	5.00.	Dr. Edgar F. Berman of Baltimore. Lecture. " Replacement of Oesophageal Lesions by Plastic Tubing." Clinical Theatre.
September		
		Exhibition. Surgical Department. " Goitre."
3rd	5.00.	Surgical Department. Film " Operation of Hæmorrhoidectomy " Clinical Theatre.
8th	10.00.	Mr. F. A. D'Abreu, Westminster Hospital. Surgical Departmental Round. Clinical Theatre.
10th	1.00.	Mr. Marston. Clinical Lecture.
22nd	10.00.	Clinical Pathological Meeting. Clinical Theatre.
24th	1.00.	Mr. Morgan. Clinical Lecture.
27th	1.00.	Sir Heneage Ogilvie. Clinical Lecture.
28th	1.00.	Dr. Hampson. Clinical Lecture.

Osteoarthritis of the Hip

WITH SOME REMARKS ON THE SEQUELÆ OF SUPPURATIVE ARTHRITIS

By JOHN ADDISON, F.R.C.S.

THE dread of arthritis is firmly established in the minds of the public. Many elderly people are disabled by osteoarthritis of the hip and spend their latter years in misery. The chief symptom is pain, which may be felt locally in the groin or buttock, or radiate to the knee, shin or ankle. Muscle cramps and acute spasms of pain due to instability of the joint or commencing subluxation are common complaints. There are three physical signs :

1. **Limp.** This occurs early and is due to limitation of extension. Later, as the deformity progresses, it is greatly accentuated.

2. **Restriction of movements.** Stiffness after rest is frequently present but although such manœuvres as putting on a shoe or cutting toe nails may become difficult or impossible, the inconvenience caused by considerable restriction of movement is surprisingly slight. In every direction—except extension—there is a large reserve of movement which normally is rarely used.

3. **Deformity.** As the arthritis progresses adduction, flexion and external rotation deformity develops. Adduction deformity may be responsible for gross apparent shortening whilst dislocation of the joint may lead to half to one inch of true shortening.

Two clinical types can be distinguished. In one movements are not much restricted but pain is severe ; in the other there is marked stiffness and deformity, but pain is not a prominent feature. Spontaneous arrest never occurs, for the arthritic changes once initiated progress inevitably. Pain sometimes diminishes as the deformed joint becomes fixed, but more frequently, as subluxation occurs and a limited range of movement remains, the symptoms become more disabling.

AETIOLOGY

The pathology, in which all parts of the diarthrodial joint are affected, is a mixture of degeneration and hyperplasia. In many patients the arthritis is secondary to some congenital or developmental abnormality or to damage as the result of disease. When there is no history or evidence of any predisposing cause the arthritis is described as " primary," and such cases may be due to senile ischæmic changes in the femoral head. The occasional occurrence of a generalised osteoarthritis suggests a systemic factor and the preponderance of female patients is hard to explain on a basis of trauma or wear and tear. The importance of injury as an ætiological factor is difficult to assess for many patients can recall minor accidents although few definitely attribute their disease to such an accident.

The figures in Table 1 are obtained from study of the history, examination, X-rays and operative findings of 55 consecutive hips in 45 individuals treated during the last two years. Cases of avascular necrosis of the head of the femur following previous fracture have not been included. While the numbers are too small to have any statistical significance, they give an indication of the variety of conditions which may lead to osteoarthritis. X-ray appearances in various forms are shown in Figures 1, 2, 3, 4, and 5.

Total No. of Osteoarthritic Hips	55
Number of Patients	45
Males	13
Females	32

Primary Osteoarthritis	16 Hips	14 Individuals

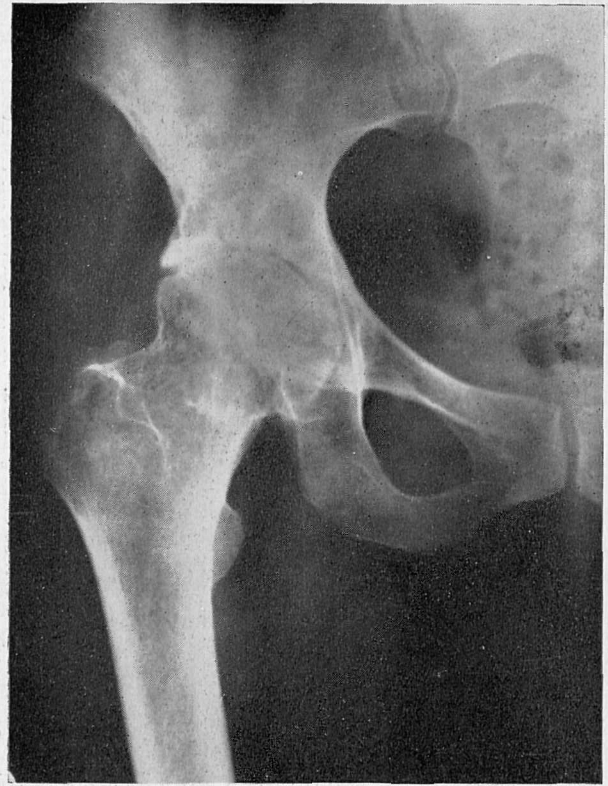


FIGURE 1. **Primary osteo-arthritis.** There is sclerosis with some cystic areas. Loss of cartilage is present especially at the " pressure area " superiorly.

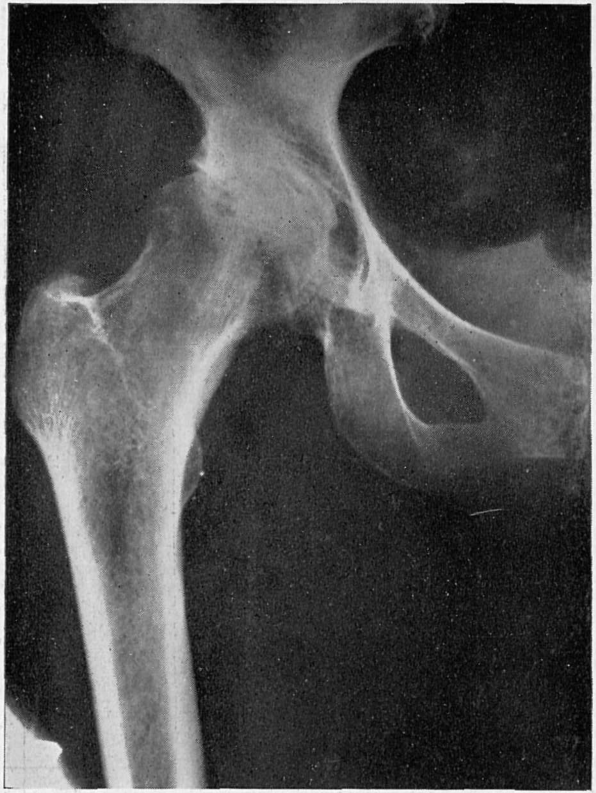


FIGURE 2. **Secondary osteo-arthritis—Shallow acetabulum.** The acetabulum covers very little of the head. Sclerosis with loss of articular cartilage are present superiorly.

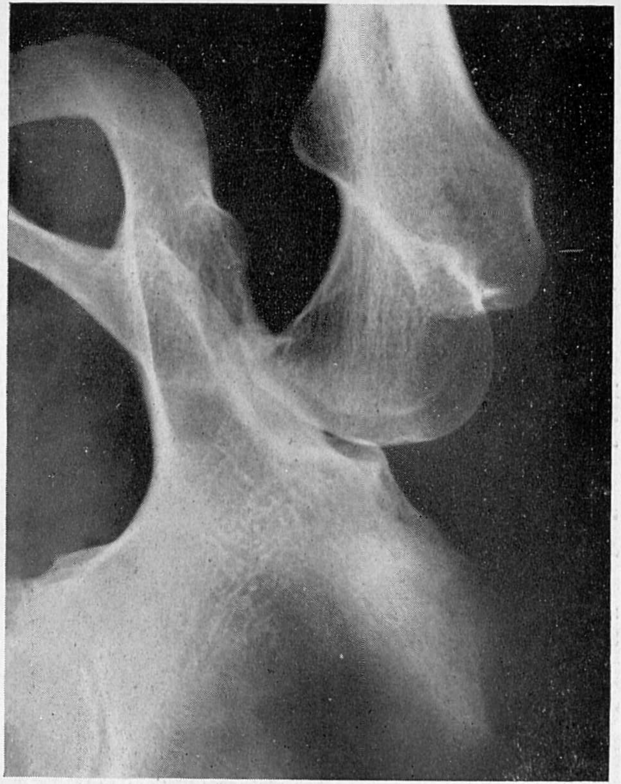


FIGURE 3. **Secondary osteo-arthritis—Congenital Dislocation of the Hip.** The acetabulum is very poorly formed and sloping. The head is deformed and the neck of the femur very vertical. The marked prominence of the profile of the lesser trochanter shows the hip is externally rotated. Sclerosis with lipping is present in the medical part of the head and adjacent acetabulum.

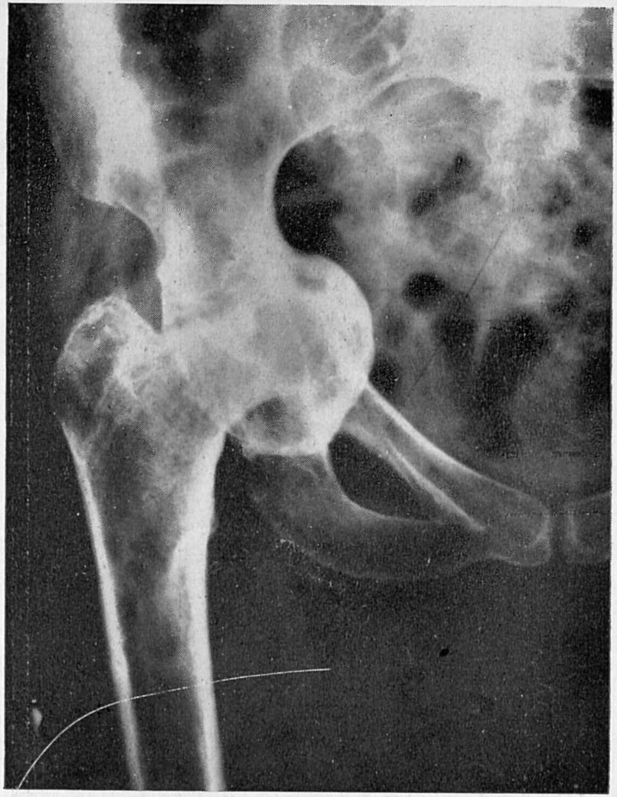


FIGURE 4. **Secondary osteo-arthritis—Arthrokatadesis. (Protrusion acetabuli, otto pelvis.)** The acetabulum is pushed well into the true pelvis. The femoral head and neck is displaced medially. Sclerosis is present.

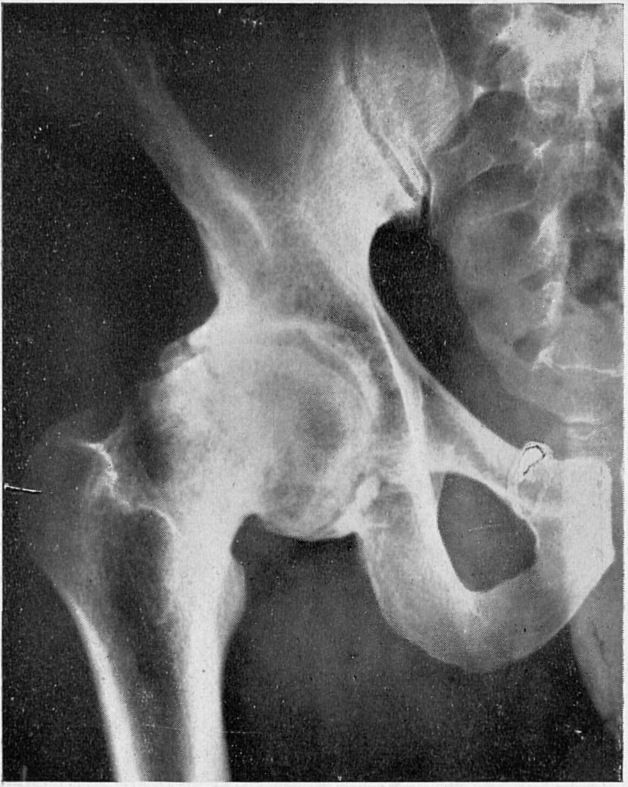


FIGURE 5. **Secondary osteo-arthritis—Slipped spiphysis (Adolescent coxa vara.)** The line along the upper border of the neck curves downwards on to the head. Normally there is a step upwards from the upper border of the neck on to the head. The head appears to be bent over on the neck. Shenton's arch is broken.

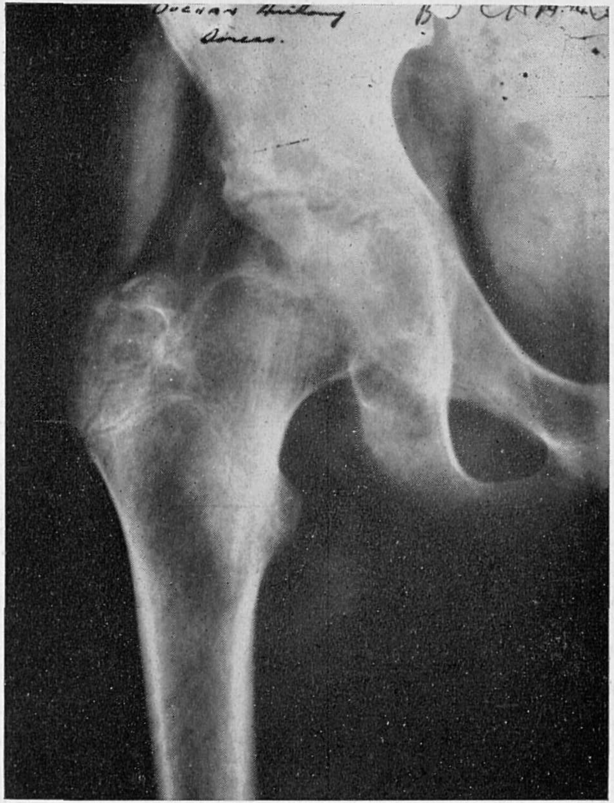


FIGURE 6. **Suppurative arthritis.** Rarification is present. The joint space is narrowed by loss of articular cartilage, at all areas. There is marked erosion of the articular surface with biting out of several areas.

Secondary Osteoarthritis

Primary Condition	Shallow acetabulum	18 Hips	15 Individuals
	Arthrokatadesis (Protrusion acetabuli)	5 ,,	4 ,,
	Congenital Dislocation of Hip	4 ,,	3 ,,
	Slipped epiphysis	3 ,,	2 ,,
	Perthes	2 ,,	1 ,,
	Rheumatoid arthritis	2 ,,	1 ,,
	Suppurative arthritis	4 ,,	4 ,,
	Shallow acetabulum with tuberculosis	1 ,,	1 ,,
		39	31

SUPPURATIVE ARTHRITIS AND OSTEOARTHRITIS

Bony ankylosis is frequently expected as the end result of suppurative arthritis of the hip. The infection may, however, subside, leaving a joint which will function almost normally for many years before osteoarthritic changes cause symptoms and disability. Four cases which illustrate this are described :

1. *S. J.* Housewife, of 54, gave a history of infection of the right hip at the age of 13. An abcess was drained and a piece of bone removed at that time. The hip was painless until 3 years ago when she developed a dull ache in the groin. Marked osteoarthritis was present.

2. *B. B.* Engineer, age 51. When 18 years old sustained a compound fracture of the right femur. This became infected and was treated with Carrel-Dakin irrigations, various operations for drainage, removal of sequestra, plating and removal of the plate. The fracture finally healed but during this time the patient complained of pain in the hip. This pain was attributed to the caliper which the patient was wearing and he received no treatment. The leg gradually became pain-free and remained so until 14 years ago. Examination and X-ray (Fig. 7) revealed gross osteoarthritic changes.

3. *D. R.* Housewife, age 22. At the age of 5 years she had scarlet fever with arthritis of the left hip. The hip remained comfortable until she was 20 years old, when, following the birth of her first child, it became painful, especially on walking. A moderate degree of osteoarthritis was present.

4. *K. S.* Housewife, age 58. At the age of 7 after a sore throat, she developed an arthritis of the left knee which healed by bony ankylosis. At the same time there was some pain in the right hip, but this subsided and the hip appeared normal until 5 years ago. On examination the hip was markedly osteoarthritic.

5. *A. B.* A boy age 12 was admitted with pain in the right hip of sudden onset. There was no history of any previous general illness or trauma. Examination showed that the hip was painful and swollen with limitation of all movements. X-ray at this time showed generalised rarefaction only. He was originally treated by systemic chemotherapy alone and, although the pain subsided, it recurred when this was discontinued. The leg was then immobilised in a plaster of Paris spica with traction, and an abcess, which had formed over the front of the joint, was aspirated. From this staphylococcus aureus was cultured and found to be penicillin resistant but aureomycin sensitive. Suitable chemotherapy was given. With this regime the pain gradually subsided. The traction was removed after four weeks but the hip kept immobilised for three months, the last two months of which were free from pain and apyrexial.

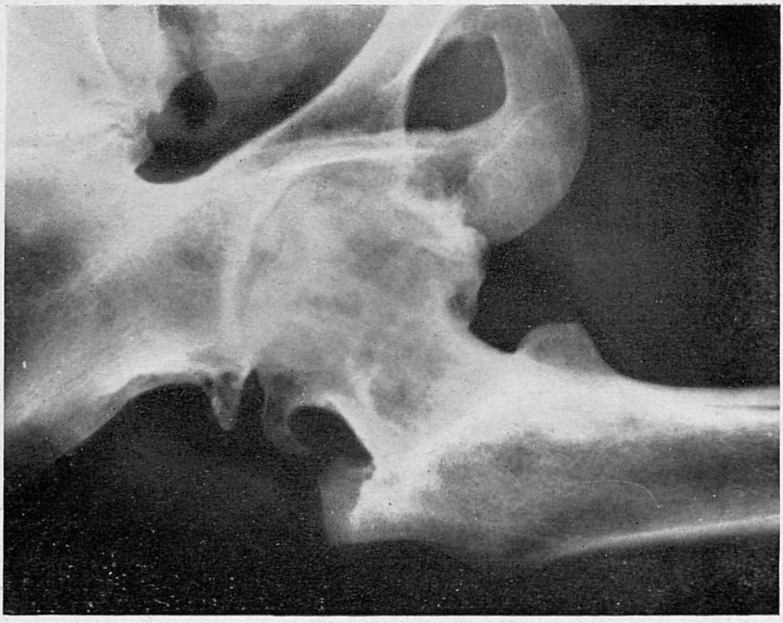


FIGURE 7 **Secondary osteo-arthritis—Suppurative arthritis.** (See table).

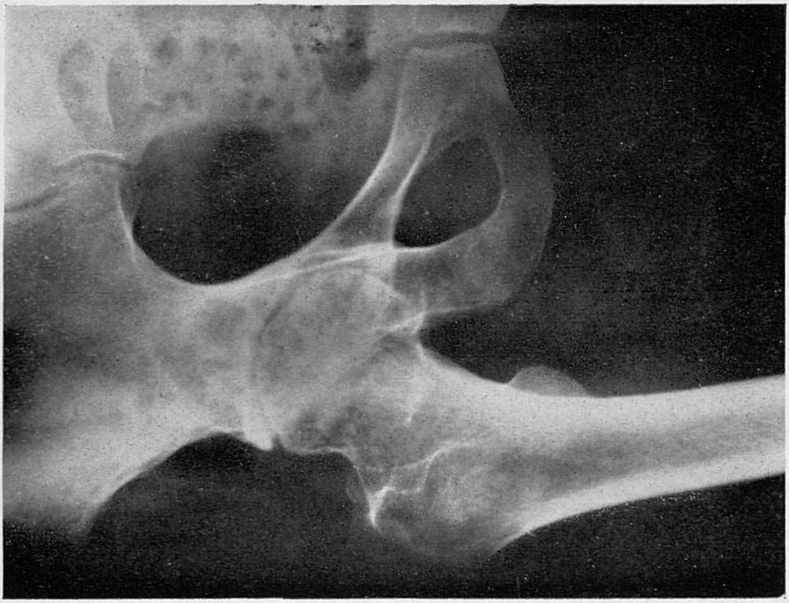


FIGURE 8. **Primary osteo-arthritis.** There is sclerosis with some cystic areas. Loss of cartilage is present especially at the "pressure area" superiorly.

On discharge from hospital eight months after onset of disease X-ray (Fig. 6) showed that there was loss of joint cartilage and erosion of joint surface. He had no pain in the hip. His movements were :

Flexion	0–80°
Abduction	0–20°
Adduction	0°
Fixed External Rotation	15–55°

Fig. 6.

In cases 1–4 either the history or the physical signs and X-rays indicate that a suppurative arthritis has healed leaving a damaged but serviceable joint. In each case there has been a considerable interval before osteoarthritic changes have become apparent. In case 5 a suppurative arthritis has healed leaving a restricted but useful range of movement. It is felt that the joint will continue to function adequately for many years before secondary osteoarthritis demands treatment.

Figs. 7 and 8 (see opposite page) show typical examples of primary osteoarthritic changes and osteoarthritis secondary to suppurative arthritis. The chief points of contrast are tabled below :

Fig. 7. SECONDARY SUPPURATIVE ARTHRITIS.	FEATURE	Fig. 8. PRIMARY OSTEOARTHRITIS.
1. Sclerosis with large patches of rarefaction. Changes over a wider area especially down the neck of the femur.	1. Alteration of calcium content.	1. Sclerosis particularly under pressure areas with a few cysts.
2. Cartilage lost over all head.	2. Loss of articular cartilage.	2. Loss most marked at pressure area initially.
3. Often marked with biting out from areas of joint surface.	3. Erosive changes.	3. Rarely present.
4. Often marked and fairly widespread.	4. New bone formation.	4. Present to a varying degree, usually limited to periphery of acetabulum and head, especially on the medial side.
5. Head tends to become enlarged and flattened with wedge-like shaped effect as seen in A.P. view.	5. Shape of head.	5. The circular shape of the head is usually retained.

SUMMARY

1. The signs and symptoms of osteoarthritis of the hip are briefly noted and various predisposing conditions mentioned.

2. Five case histories are described. They demonstrate that suppurative arthritis may subside leaving a damaged but serviceable joint, and that secondary osteoarthritis may take many years to develop.

3. The radiological appearances of osteoarthritis of the hip secondary to suppurative arthritis are contrasted with those of primary osteoarthritis.

Barbiturate Poisoning

By K. S. MACLEAN, M.D.

From a Clinical Lecture delivered at Guy's Hospital Medical School on Friday, 27th July, 1951.

THE barbiturate group of drugs first came into use in 1903 when Fischer and von Mehring introduced veronal as an hypnotic or sedative. Since then hundreds of compounds have been studied and upwards of thirty have found a place in therapeutics. Peptic ulcer, spastic colon, hypertension, epilepsy, insomnia and mental illnesses arising from anxiety or tension are but some of the conditions in which the barbirurates are of proven value and indeed there can be few medical diseases in which this group of drugs is not at times prescribed.

Thus it is hardly surprising that cases of barbiturate poisoning are becoming increasingly common and in 1948 accounted for more deaths than any other poison except carbon monoxide. Suicides are about three times as common as fatal accidents. Accidents are especially liable to occur in children, and patients should always be warned to keep barbiturate tablets in a safe and inaccessible place. Genuine mistakes in dosage occasionally occur, and the theoretical possibility of a patient who has taken his normal nightly sedative becoming confused and forgetful so that he inadvertently repeats the dose on several occasions, must be considered. It appears likely, however, that such an explanation is frequently put forward to explain what was in fact a suicidal attempt.

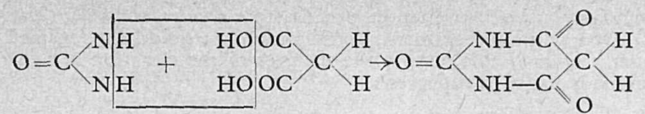
Barbiturates are dangerous drugs and should always be prescribed with care. A prescription should not be worded so that it can be repeated at the patient's discretion. Recently it has become law that no prescription for barbiturates can be repeated more than three times and that three days or more must elapse between each renewal. This safeguard does not, of course, mean that patients are unable to store large quantities of barbiturates if they so wish, but it does something to cut down the risk of very large quantities being accumulated after one visit to a medical practitioner.

Barbiturates may be of considerable value in certain cases of depression and here especial consideration must be given to the issue of these drugs to out-patients. It is, however, probably true to say that if the risk of suicide makes it appear unwise to allow a patient access to a supply of these drugs, it is sufficiently great to make admission to hospital a necessity. It does, however, seem reasonable where depression is present for the practitioner to repeat the prescription at intervals of not more than one week.

PHARMACOLOGY

The barbiturates exert their action by interfering with the oxidation of glucose in the body cells. As the cells of the central nervous system are unable to obtain oxygen from other sources, it is not surprising that it is upon this system that the main effect of their action is felt. In therapeutic doses they produce sleep by cortical depression as well as by a direct action upon the sleep centre. They have no appreciable analgesic effect and so are useless in those patients where sleeplessness is due to pain, unless they are administered together with an analgesic. They also reduce gastro-intestinal tone, so that they are helpful in controlling the pain of intestinal spasm, both by this direct effect and by the depression of cortical activity. In toxic doses they depress the respiratory centre, and have many other actions in the central nervous system. They also cause hypotension and very occasionally cardiac irregularities. Pulmonary œdema with a liability to subsequent infection is a frequent complication of overdosage.

Barbituric acid is formed by a combination of Urea and Malonic Acid as shown below.



Urea. Malonic Acid. Barbituric Acid.

Members of the group vary somewhat in their action upon different parts of the nervous system. The main and most important difference is, however, the speed with which their action occurs and the rapidity with which they are removed from the body. These differences depend upon the groups which are substituted for the two hydrogen atoms in the Barbituric acid molecule. In considering the action that any member of the group is likely to have, four principles should be observed.

(*a*) Substitution of a hydrogen atom by a phenyl group causes the depressant effect upon the cortex to be preponderant, e.g. phenebarbitone depresses cortical activity but is not a good sedative.

(*b*) The more complex the substitution group, the quicker will the compound be broken down in the body and so the shorter will be its action.

(*c*) Sodium salts always have a more rapid onset in their action and this is of short duration.

(*d*) Long complex sidechain substitution may occasionally have a convulsant effect upon the cortex, as well as the general depressant action of the group. Thus it is possible to see convulsions in an untreated patient suffering from barbiturate poisoning.

Barbiturates are removed from the body by two methods. They may be broken down in the liver and this occurs most readily in those compounds with complex substitution groups. The more stable substances, however, are eliminated by the kidneys, a process which takes considerably longer.

The following table shows eight of the barbiturates in common use today. They are divided into four pairs according to the length of their action.

I. Long Action (10–12 hours).
   Veronal (Barbitone).
   Luminal (Phenobarbitone).

II. Medium Action (6–8 hours).
   Sodium Amytal (Amylobarbitone).
   Soneryl (Butobarbitone).

III. Short Action (2–4 hours).
   Seconal (Allobarbitone Sodium).
   Nembutal (Pentobarbitone Sodium).

IV. Ultra-Short Action (Less than 1 hour).
   Pentothal (Thiopentone Sodium).
   Evipan (Hexabarbitone Sodium).

In Group I the substituted phenyl group and the long continued action makes phenobarbitone especially suitable for the control of epileptic attacks.

Group II comprises two excellent sedatives for people who find difficulty in sleeping in the early hours of the morning, while the short action and rapid removal of the substances in Group III makes them specially suitable for patients in whom the difficulty lies in getting off to sleep initially.

Group IV comprises the two best known basal anæsthetics.

The Signs and Symptoms of Acute Barbiturate Poisoning

Acute poisoning is very unlikely to occur with therapeutic doses of these drugs. With the exception of the basal anæsthetics at least 6 or 8 times the therapeutic dose must be taken before dangerous symptoms are likely to occur. After toxic dose an initial stage of mania and hallucination may or may not ensue, but within an hour drowsiness comes on and rapidly deepens into coma. This may have a fatal termination, usually from respiratory failure, but in many cases, even without treatment, consciousness is gradually regained after many hours. Even if this occurs, the dangers of the situation are still great as pneumonia is likely to supervene.

In the early stages vasodilatation causes the face to be flushed, but as coma deepens and pulmonary œdema becomes a feature of the condition, cyanosis ensues. The pulse may be slow at first, but will become fast and thready with the onset of pulmonary œdema, and heart failure may supervene. Respiration slows and may become Cheyne-Stokes in character. While still conscious the patient will often complain of diplopia, and subsequently ophthalmoplegias may occur. Nystagmus is frequent, and the pupils tend to be small, sometimes even approaching the pin-point size seen in opiate poisoning. The corneal reflex will disappear as coma deepens and gives a valuable clinical guide to the depth of unconsciousness. Tendon reflexes are abolished and the plantars commonly become extensor. The patient's reaction to painful stimuli should always be ascertained.

It is not proposed to discuss at length differential diagnosis of barbiturate coma. It has to be distinguished from the other causes of unconsciousness, and the history taken from relatives or friends is often of the greatest value. Enquire whether a container which might have contained tablets was found near the patient, whether the patient was known to have had a prescription for sleeping tablets or whether he was known to have been visiting a doctor. Above all it is essential to keep carefully all specimens of excreta or body fluids voided by the patient. Fæces, urine, vomit and of course stomach washings or cerebro-spinal fluid if lumbar puncture is undertaken, must be saved for analysis. They may provide invaluable information in arriving at a diagnosis in a case of poisoning, while if the patient succumbs they will obviously be of great medico-legal importance.

THE TREATMENT OF ACUTE BARBITURATE POISONING

In treating any case of poisoning there are three principles to be observed. In the first place the poison must be removed as quickly and as completely as possible. Secondly, if there is a known specific antidote which will prevent further absorption or form a non-toxic compound with the poison it must be given. Finally, symptoms must be treated as they occur along normal medical lines.

There are two possible ways in which a poison can be removed from the stomach ; it can be vomited or a stomach tube can be passed and a washout performed. On the whole a stomach washout is by far the most satisfactory method because it does not carry the added risk of inhalation of vomit. One must always remember, however, that the poison may have been taken in tablet form and in these cases there is a real danger that the tablets will not come up through the tube. It is therefore wise if the presence of undissolved tablets is suspected or if the patient is known to have recently had a large meal to administer an emetic before the washout is performed. Needless to say the greatest care to prevent inhalation of vomit into the trachea is essential. The washout may be performed either with a soft tube or with a Sonoren's evacuator. This is an excellent piece of apparatus and its use should be familiar to all doctors. When passing the tube in a deeply comatose patient it is by no means impossible to pass it into the trachea, and the end should be held under water to make sure that bubbles do not come up as the patient breathes before any fluid is introduced. Always introduce fluid into the stomach before attempting to empty it, as efforts to withdraw from an empty stomach may result in trauma. The washout must continue until the washings are clear and a minimum of 2 gallons of water must be used. In barbiturate poisoning an alkaline solution increases the solubility of the drug and so is contraindicated for the washout. Ordinary water is satisfactory. If it is necessary to improvise a stomach tube from rubber tubing the distance from the stomach to the incisor teeth in an adult is 20 inches.

If an emetic is required the following table shows some of the more efficient varieties.

A. 10 oz. of tepid water containing either
ZINC SULPHATE 30 grs. ;
IPECACHUANHA POWDER 30 grs. ;
IPECACHUAHNA WINE 6 dr. ;
COPPER SULPHATE 5 grs. ;
MUSTARD 4 dr. (1 tablespoon) ;
SALT 8 dr. (2 tablespoons).

B. APOMORPHINE HYDROCHLORIDE gr. 1/10. By hypodermic injection.

C. As a last resort copious draughts of tepid water followed by mechanical stimulation of the fauces.

There is no specific antidote for barbiturate poisoning. The administration of sodium succinate has been suggested as providing an alternative method for supplying the brain cells with oxygen for its oxidation is not hindered by the barbiturates. There is little evidence, however, to suggest that it is of much practical value.

Symptomatically there are four main contingencies which may call for energetic treatment. These are respiratory depression, hypotension, pulmonary œdema with its subsequent pneumonia and prolonged coma. Respiratory depression is by far the most important of these and is responsible for the majority of deaths. Artificial respiration may be necessary and in an emergency any method will suffice as a temporary expedient. It may be necessary to continue for several hours and in such cases a closed anæsthetic machine delivering pure oxygen is very satisfactory, or failing this an open circuit machine may be used with an intratracheal tube. A very excellent apparatus for giving continued artificial respiration has recently been designed. This is the " Oxford Insufflator." A mask is applied to the patient's face and by turning a small lever to the " inhale " position oxygen can be delivered to the lungs from an attached cylinder under controlled pressure. The lever is then switched to the " exhale " position when the oxygen is shut off and the air is expelled from the patient's respiratory tract by the automatic deflation of the thoracic cage. This procedure is repeated 12 or 15 times a minute. This apparatus has recently been supplied to hospitals by the Ministry of Health in order to assist respiration while patients are removed from a respirator for nursing procedures and it is a most efficient machine. It is scarcely necessary to stress that oxygen is an extremely inflammable gas and great care must be taken to avoid fire when using it in unaccustomed situations.

The administration of oxygen with 5 per cent. carbon dioxide for a minute or two at a time may help to stimulate the respiratory centre after normal breathing has been restored.

Of the drugs used to stimulate respiration " picrotoxin " is probably the most active. In deep coma it may be given in 6 mg. doses at intervals of 15 minutes until the corneal reflexes return. If the situation is urgent the initial doses, well diluted, may best be administered intravenously, great care being taken to see the injection is given very slowly. As soon as there are signs that the coma is lightening the interval between injections should be increased to from 30 to 60 minutes. Unfortunately overdosage may bring on convulsions which may be extremely severe and produce status epilepticus. This may necessitate the administration of intravenous pentothal or evipan, a step one if very loth to adopt when treating a patient with barbiturate poisoning. If absolutely essential 0·1 g. of these ultra-short acting barbiturates should be given intravenously in 5 c.c. of water. Nikethamide (coramine) is a safer though perhaps less efficient substitute for picrotoxin. In comatose patients the dosage needs to be of the order of 2—4 c.c. every 15 minutes by intravenous injection. If neither picrotoxin nor nikethamide is available, strychnine gr. 1/16 may be given at hourly intervals by the subcutaneous route.

If low blood pressure is a feature, amphetamine is the drug of choice. It is probably wise to leave from 25 to 40 mg. of amphetamine sulphate in the stomach at the end of the washout in all severe cases. If hypotension persists after this methylamphetamine hydrochloride may be given in doses of 30 mg. by the intramuscular or 10 mg. by the intravenous route as the occasion demands.

The measures outlined above will of course help to control the onset of pulmonary œdema. The patient should be turned frequently and periodic administration of oxygen and 5 per cent. carbon dioxide in order to stimulate deep breathing are helpful. Penicillin should be given as a prophylactic against lung infection to all patients who have been comatose.

The coma may last for 48 hours or even longer and good nursing is of course of paramount importance here. A distended bladder must receive attention. Intravenous or rectal fluid may have to be given but especial care must be taken to ensure that pulmonary œdema is not produced by over-treatment.

Acute barbiturate poisoning is therefore a medical emergency that must be treated promptly and energetically. Of all patients admitted to hospital, it should be possible to attain a survival rate of ninety per cent.

THE MENTAL STATE IN ACUTE BARBITURATE POISONING

It must be remembered that the majority of these patients have attempted suicide, and the treatment of the mental illness that brought about such a state of affairs is every bit as important as that of the physical condition. Very commonly a depressive illness is the all important underlying pathology, and this must be recognised and treated. Unless one has considerable experience in dealing with this type of illness it is wise to call in the aid of a psychiatric physician who can decide upon the line of treatment to be adopted. Many of these patients may require E.C.T. or other psychiatric therapy before they are fit to take up their normal life again. Little credit is due to the doctor who allows a patient to return home after recovery from a suicidal attempt in a state of mind which makes a further and perhaps successful repetition likely in a few days' time.

The medico-legal aspect must also be considered. Attempted suicide is a crime in this country and failure to report such an occurrence to the police technically makes the doctor an accessory after the fact. The police are sympathetic and as a general rule only want to be satisfied that the patient is going to receive proper treatment. Prosecutions are unusual and are generally only brought when special circumstances exist such as an attempt made in public which caused distress and inconvenience to a large number of people.

BARBITURISM

The subject of barbiturate poisoning would not be complete without a reference to the more chronic type, the so-called barbiturism.

The most common symptom from the long continued administration of a barbiturate drug is headache, and only too frequently this is attributed by the doctor to the condition for which the drug was originally administered and the dose increased.

More serious symptoms may occur from too liberal and prolonged prescription of these drugs and especially in morphine addicts who have been given large doses of a barbiturate as substitution therapy when the opiate was withdrawn. In such people various psychoses including mania may occur. Tremors are common and ataxia and nystagmus frequently seen. The tendon reflexes may be exaggerated or depressed, and signs of pyramidal tract involvement are not uncommon. Various types of rashes, generally macular or urticarial, occur, and the urine frequently contains albumen and casts. The correct interpretation of this condition is often missed and it should always be borne in mind when making a diagnosis in patients who exhibit bizarre neurological signs. An exacerbation of symptoms on withdrawal of the drug, previously not thought to occur, has recently been recognised, and it is wise to substitute choral or bromides for a few days after prolonged barbiturate therapy is omitted.

The treatment of barbiturism is along general lines. The drug should be withdrawn with substitution of an alternative hypnotic. The general health and nutrition of the patient should receive attention, and psychiatric treatment instituted where necessary.

House Appointments

1st SEPTEMBER, 1951

ASSISTANT HOUSE SURGEONS.

To Mr. Slesinger : Mr. G. A. Taylor.
" Mr. Wass : Mr. P. V. Skinner.
" Mr. Blackburn : Mr. W. G. Davies
" Mr. Lawrie : Mr. P. A. Zorab.
" Mr. Glover Mr. A. S. Harris.

Appointed for six months, the first three months as A.H.S.

OUT-PATIENT OFFICERS.

Mr. J. W. Goodfellow.
Mr. J. C. Gazet.
Mr. G. A. E. Baker.
Mr. D. J. Stoker.
} 3 *months.*

HOUSE SURGEONS.

To Sir Heneage Ogilvie: Mr. J. Scorey. 3 *months.*

" Mr. Massie : Mr. J. C. C. Kendall. 6 *months.*

" Mr. Eckhoff : Mr. P. H. Kendall. 3 *months.*

" Mr. Atkins : Mr. J. W. Bradbeer 6 *months.*

HOUSE PHYSICIANS.

To Sir John Conybeare Mr. W. Vans Agnew.
and Dr. Hardwick : Mr. D. B. Amos.
6 *months.*

" Dr. Boland and Mr. J. A. C. Bamford.
" Dr. Baker : Mr. I. Kelsey Fry.
3 *months.*

" Dr. Hampson and Mr. I. B. Thomas.
" Dr. Kauntze : Mr. B. H. Bass.
3 *months.*

" Dr. Douthwaite and Mr. J. R. Rees.
" Dr. Mann : Mr. J. H. Bailey.
6 *months.*

RESIDENT OBSTETRICIANS.

1. 5.51—31.10.51 : Mr. A. W. Cook.
1. 7.51—31.12.51 : Mr. W. H. Watson.
1. 9.51—29. 2.52 : Mr. H. M. Baird.
1.11.51—30. 4.52 : Mr. J. Taylor.

OPHTHALMIC HOUSE SURGEON.

Vacant.
(Non-Resident)

THROAT AND EAR HOUSE SURGEON.

Mr. H. V. Hoyle. 3 *months.*

DERMATOLOGICAL HOUSE PHYSICIAN.

Mr. J. M. Palmer. 3 *months.*
(Non-Resident)

NEUROLOGICAL HOUSE PHYSICIAN.

Mr. K. W. Gray. 6 *months.*

GENITO-URINARY HOUSE SURGEON.

Mr. D. R. Pugh. 6 *months.*

CHILDREN'S HOUSE PHYSICIANS.

Mr. E. J. Masters. 6 *months.*
Mr. A. S. F. Butcher. 6 *months.*

HOUSE SURGEON TO THE THORACIC UNIT.

Mr. C. N. Watson. 3 *months.*

HOUSE SURGEON TO THE NEURO-SURGICAL UNIT.

Mr. J. G. Hamilton. 6 *months.*

RESIDENT JUNIOR CLINICAL PATHOLOGISTS.

1.10.51—31.3.52 : Mr. J. A. J. Smith.
12.10.51—11.1.52 : Mr. J. T. Cecil.

HOUSE PHYSICIANS IN THE YORK CLINIC.

1.11.51—29.2.52 : Mr. J. L. Hayward.
1. 9.51—29.2.52 : Mr. P. J. F. Walsh.

RESIDENT ANÆSTHETISTS.

20. 3.51—19. 9.51 : Mr. J. V. Kilby.
20. 9.51—19. 3.52 : Mr. P. S. B. Russell.
12. 5.51—11.11.51 : Mr. R. J. Vale.
12.11.51—11. 5.52 : Mr. K. A. Baker.

R.M.O's., NUFFIELD HOUSE.

18.9.51—17.3.52 : Mr. M. C. Gilbert.
Vacant.

ORPINGTON HOSPITAL.

General House Surgeon.
Mr. G. H. Fisch. 6 *months.*

Throat and Ear House Surgeon.
Mr. S. H. Richards. 3 *months.*

PEMBURY.

House Physician.
Mr. E. M. Newton. 6 *months.*

House Surgeon.
Mr. J. R. Robinson. 6 *months.*

QUEEN MARY'S, SIDCUP:

House Surgeon.
Mr. R. J. O. Catlin. 6 *months.*

House Physician.
Vacant. 6 *months.*
(beginning August 15th, 1951.)

Hospital Information, etc.

APPOINTMENTS VACANT

Applications are invited for a full-time **Research Fellowship in the Thoracic Surgical Unit** for research on cardiovascular problems commencing on 1st October, 1951. It is desirable that applicants should possess a higher qualification in Surgery. Salary will depend upon the experience of the person appointed. Applications, with the names of three referees, should be sent to the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, not later than the **1st September, 1951.**

RESIDENT MEDICAL OFFICER NUFFIELD HOUSE (PRIVATE BLOCK) GUY'S HOSPITAL

Applications are invited for the post of **R.M.O., Nuffield House,** to commence on October 6th, 1951. The post is subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff of the National Health Service.

Salary £700 per annum, less £100 per annum for board and lodging.

Applications, together with copies of two testimonials, should be lodged with the Superintendent on or before **21st September, 1951.**

ROYAL COLLEGE OF PHYSICIANS OF LONDON

M.R.C.P.
July, 1951

I. A. B. Cathie D. C. Deuchar
D. R. S. Saunders K. Simpson

ROYAL COLLEGE OF PHYSICIANS OF LONDON

Dr. R. E. Lane has been appointed Ernestine Henry Lecturer for 1952.

UNIVERSITY OF LONDON

M.D. Examination
July, 1951
Branch 1 (*Medicine*)

W. Fox (Mark of Distinction)
J. G. Hamilton C. J. Zerny

Branch 2 (*Pathology*)

K. Anderson M. B. King
A. J. Beale O. G. Lane
P. J. Collard P. L. Masters
R. C. Jennings

Third (*B.D.S.*) *Examination in Dental Surgery*
July, 1951
Honours

*A. G. Jennings †R. V. S. Muscat ‡J. Stott

* Distinguished in Pharmacology and Orthodontics.
† Distinguished in Medicine and Dental Surgery.
‡ Distinguished in Pathology and Bacteriology.

Pass

E. M. Bearn I. I. Singer
A. J. Bligh J. C. Walby
R. J. G. Day W. C. Whaites
P. Elias M. L. Wilder
N. E. Price W. J. P. Wilkie

Supplementary Pass List

The following students have passed in Group I :—

R. E. Collinson S. S. R. Earl
J. S. Tisdall

ROYAL COLLEGE OF OBSTETRICIANS AND GYNÆCOLOGISTS

M.R.C.O.G.
July, 1951

G. J. Amiel J. K. Ogden T. M. Thomas

SOCIETY OF APOTHECARIES OF LONDON

Final Examination
July, 1951
Surgery

*A. C. D. Abdool-Raman *G. H. Fisch

Midwifery

*G. H. Fisch

* Have completed the examination.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

F.R.C.S.
Primary Examination
July, 1951

J. E. Blundell J. G. Brice

MEDICAL RESEARCH COUNCIL ROCKEFELLER TRAVELLING FELLOWSHIP

Rockefeller Travelling Fellowships in Medicine for 1951–52 have been awarded to Dr. J. N. Hunt and Dr. G. C. Kennedy.

APPOINTMENTS

G. R. W. N. Luntz, M.R.C.P., appointed Consultant Chest Physician, Anti-Tuberculosis Centre, 151, Great Charles Street, Birmingham, 3, and Consultant Chest Physician and Medical Superintendent, Romsley Hill Sanatorium, Romsley, Halesowen, near Birmingham, Worcestershire.

J. D. L. Reinhold, M.A., B.M., M.R.C.P., D.C.H., appointed Senior Assistant Resident in Medicine, Boston Children's Hospital ; Teaching Fellow in Pædiatrics, Harvard Medical School, Boston, Mass., U.S.A.

BIRTHS

EVANS.—On August 12th, 1951, at Nuffield House, Guy's Hospital, to Winifred (née Groom), wife of Michael L. Evans, M.R.C.S. L.R.C.P.—a brother for Timothy and Sara (Jonathon).

FORBES—On August 3rd, 1951, to Pamela, wife of John Forbes, M.D., of Wrexham—a son.

GARDENER.—On July 14th, 1951, at 16, West Street, Wareham, Dorset, to Kathleen (née Young), wife of P. A. Gardener, L.D.S., R.C.S.—a son (William Norman), a brother for Stephanie.

HUMPHRIS.—On August 12th, 1951, at Homeside Nursing Home, Purley, to Betty, wife of D. T. Humphris, L.D.S., R.C.S.—a daughter (Susan Elizabeth).

PETT.—On August 14th, 1951, at Whitehaven, 61, The Drive, Hove, Sussex, to Margaret (née Miller), wife of Basil W. Pett, B.D.S.—a brother for Christopher.

SAUNDERS.—On August 3rd, 1951, at Edgware Hospital, to Nan (née Janes), wife of Douglas Saunders, M.R.C.P., of 38, Hillfield Lane, Aldenham, Herts.—a daughter (Deborah Elizabeth).

TITFORD.—On July 20th, 1951, to Antoinette (née Rymer), wife of Keith R. Titford, B.D.S.—a daughter.

MARRIAGES

MENZIES—BARCLAY.—On August 18th, 1951, at St. Clement's Church, Leigh-on-Sea, Essex, Colin James Grant Menzies, M.B., B.S., to Jean Winifred Barclay, M.S.R.

SOOTHILL—THORNTON.—On May 7th, 1951, at Wyther Parish Church, Leeds, John Farrar Soothill, B.A., M.B., B.Ch., to Brenda Thornton, L.R.A.M., of Leeds.

DEATHS

ECCLES.—On July 24th, 1951, George Dunluce Eccles, M.B.E., M.C., M.B., B.S., of St. Olave's Hospital, London, S.E.16.

Eds. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1647 *8th September* 1951 *One Shilling*

PASSIM

"TO *err is human, to forgive is divine*" *and, by the same token, to complain* is easy, while to make allowances demands a great deal more charity and generosity of character. For a long time we have aimed at the nobler course. Now, at last, we are permitting ourselves a few criticisms only after prolonged nurture and careful consideration.

The principal cause of our agitation is the activity of the Works Department. Two years ago we felt that they were doing a very good job ; our comment was published appropriately. Today, on the other hand, their endeavours completely confound us. Granted today they are faced with difficulties of labour and materials, yet these should present as problems to be solved, not as excuses to be offered.

To judge by the scene before us, the Works Department exhibits a special facility for " lateral spread " but very little for " forward advancement." In other words, they penetrate to every corner of the Hospital structure, seldom apparently to attain that degree of completion which can be signalled by their ultimate retirement. Thus, seven months' ago, the Eye Ward was transferred to Bright Annexe, a " temporary " arrangement so that Ruth and Barnabas might be reconditioned. The removal in itself was a vast labour and upset to the Nursing Staff. Still, they soon gained encouragement, for hordes of men invaded the recently vacated premises and the dust flew in all directions. What is more, blue-prints were seen being passed from hand to hand and subjected to a most impressive scrutiny. All too soon, though, came a sudden suspension of all the labours. But this, after all, did not entirely dishearten us. Work, at any rate, was resumed ere long in Barnabas. To get some of the Eye Ward patients back first of all ? No ! To move part of Victoria down instead ? Yes ! And thereafter all constructional energy appeared re-directed to the Maternity Wards. Dust then flew on the first floor, hammering proceeded apace and trolleys on route for Victoria, Division II, negotiated with difficulty the obstacles in their path. But not for long. After a few weeks came another suspension, which seems to have lasted until recently, apart from a few sporadic attempts at resumption.

The nursing of sick patients was conducted meanwhile in Bright Annexe. Admittedly conditions were dismal for the patients and exasperating for the nurses, yet despite the fact that beds were jammed against the wall, that the place looked like a stable and that the water failed to run hot from the taps for more than a few moments, everyone kept surprisingly cheerful.

Those who pondered where the " Stakhovanites " might have disappeared soon found the answer ; the College " Spit " appeared next as the site of their manœuvres. At the same time electricians appeared in the various wards of the medical block (perhaps the signal lights which now flash at night with a suddenly disturbing Festival brillance are a tribute to their skill), heaps of rubble made their début, barrows filled the lifts. lavatory pans adorned the landings and scaffolding of ingenious construction was erected on the stairways. The fact that no one has yet been seen using this scaffolding is possibly of deep significance.

Carping apart, we thoroughly appreciate that the Works Department has much to do and is making a brave show of shouldering its burdens. But, if only for the sake of tidyness and efficiency, surely a little more organisation and control could be devoted to its efforts. The monetory system, we thought, was the servant of civilisation ; health, the mistress of human achievement and happiness. Yet, when redecoration is required in a bank, the work is invariably done overnight, most expeditiously and with negligible disconcertment to the daily proceedings. In a hospital, it seems, no such scheme is possible. Surely at Guy's, we might ask for one job to be completed at a time. Then, what is possibly more important, could not some system be instituted of an "orderly officer" round. undertaken each week in respect of the Hospital structure and the work proceeding upon it. Only with continuing supervision of this kind could the place be maintained in such a condition that it would not provoke the kind of remark of a visiting physician the other day " I managed to pick my way up your dismal stairs."

Readers will note that the price of the *Gazette*, as printed on the cover, has been increased from ninepence to one shilling as from September 1st, 1951. This applies to single copies and, for the time being, there is to be no alteration in the subscription rates.

South African Dinner

During the recent visit of Mr. N. L. Eckhoff to South Africa, a dinner of old Guy's men was held at the Durban Club with Dr. Stanley Copley, F.R.C.S. (1899) in the chair. The following were present :—

Mr. N. L. Eckhoff
Mr. W. S. Stranack
Dr. Walt
Dr. de Marigny
Dr. Hulett
Mr. Unstead
Mr. F. Copley
Dr. R. R. Mackenzie
Mr. H. C. Warner
Mr. W. C. Kendrick
Mr. Hugh Thomson
Mr. Calder
Mr. Irwin
Dr. S. Copley
Mr. John Visser
Mr. Elstob
Mr. Boyd
Mr. G. Price
Mr. A. Copley
Mr. L. Knox
Mr. Du Plessis
Dr. J. Leeming
Mr. Sparg
Mr. Fletcher
Mr. Hobson Jones

The toast of Guy's Hospital was propoesd by Mr. H. C. Warner and responded to by Mr. Eckhoff.

September		**ACADEMIC**
		Exhibition. Surgical Department. " Goitre."
10th	1.00.	Mr. Marston. Clinical Lecture. " Choice of Anæsthetic."
14th	1.00.	Dr. Hardwick. Clinical Lecture. " The Treatment of Renal Failure."
17th	1.00.	Mr. Atkins. Clinical Lecture. " Surgical Aspects of Peripheral Vascular Disease."
20th	1.00.	Mr. Wass. Clinical Lecture. " Swellings of the Testical and Epididymis."
21st	1.00.	Dr. Holling. Clinical Lecture. " The Investigation of Peripheral Vascular Disease."
22nd	10.00.	Surgical Department. Clinic-Pathological Meeting. Clinical Theatre.
24th	1.00.	Mr. Morgan. Clinical Lecture. " Toxic Amblyopia and Methyl Alcohol Poisoning."

Thyrotoxicosis and Thiouracil

By GUY BLACKBURN, M.B.E., M.CHIR., F.R.C.S.

A Clinical Lecture delivered in Guy's Hospital Medical School on 5th June, 1951

LADIES AND GENTLEMEN.—I want to apologise for choosing a subject which has been dealt with recently in a clinical lecture but I shall endeavour to discuss a slightly different aspect from that which Dr. Bishop considered about a fortnight ago. As I hope to show you in the course of this lecture, however, there is no substantial difference between the medical and surgical viewpoint in relation to the thyrotoxic patient today.

I have called this lecture Thyrotoxicosis and Thiouracil but I want, in the main, to deal with medical treatment by thiouracil and radioactive iodine and to give you some sort of idea, a very meagre comparison, of the relative merits of these two forms of therapy.

May I start by showing you two patients ? It will be somewhat easier, having seen the two patients, to illustrate some of the principles that have to be elaborated in discussing ætiology and treatment.

The lady has been a patient at Guy's Hospital for a number of years. She was operated on during the war by Mr. Davies-Colley for thyrotoxicosis with fibrillation and you can see she now has a scar in the neck with obvious exophthalmos. There are also telangiectic changes indicative of past X-ray therapy, given because the section surprisingly showed adeno-carcinoma—an occasional finding even in a toxic goitre. Six years later she appeared again with a new swelling in the neck, still fibrillating. The question at issue was whether this was a lateral aberrant thyroid—that is a metastasis in a lymph gland — or hypertrophy of residual non-malignant thyroid tissue. To decide the point, she was given a tracer dose of radioactive iodine in order to plot the take-up. This was in favour of the latter explanation.

Accordingly, the swelling was excised and the patient is better off without it. The section shows nodular thyroid tissue without the characteristic features of malignant disease.

Now I want to show you another thyrotoxic patient, who illustrates one feature of thyrotoxicosis commonly seen in men, namely, muscular weakness and loss of power. This patient came to the out-patients' department about two months ago. The story is that since 1946 he has had claustrophobia, palpitations and diarrhœa. He also noticed trembling of the hands, nervousness, excessive sweating and breathlessness. He had most of the eye signs which we ordinarily associate with thyrotoxicosis and his pulse rate was 120. You will agree that he has no exophthalmos but he has a stare and some tremor.

I would remind you that, in men, an inability to lift weights and a general loss of strength is characteristic of the thyrotoxic state. At the same time the patients lose weight. One of the indications of progress on thiouracil treatment is, therefore, gain in weight, reduction in pulse rate and subjective improvement in practically every respect. In this particular case the B.M.R. has come down from plus 50 to normal in the course of seven weeks' treatment.

There you have so-called primary thyrotoxicosis in two phases. One patient has been treated by thyroidectomy and X-rays and then by a second operation ; the other by iodine and propyl-thiouracil (250 milligrams per day in divided doses). Allow me to remind you that primary thyrotoxicosis and secondary thyrotoxicosis are sometimes not easy to distinguish—perhaps in 15% of cases.

Secondary thyrotoxicosis nearly always presents with cardiovascular symptoms and the patients come into hospital with fibrillation. In primary thyrotoxicosis, on the other hand, there is a regular tachycardia, the tremor is well marked, the eye signs are prominent and the psychic disturbance is considerable.

I am on dangerous ground if I go far into the psychiatric aspects of thyrotoxicosis. I will merely remind you, however, that the thyrotoxic young patient is of a type easily upset by the little things of life rather than the big

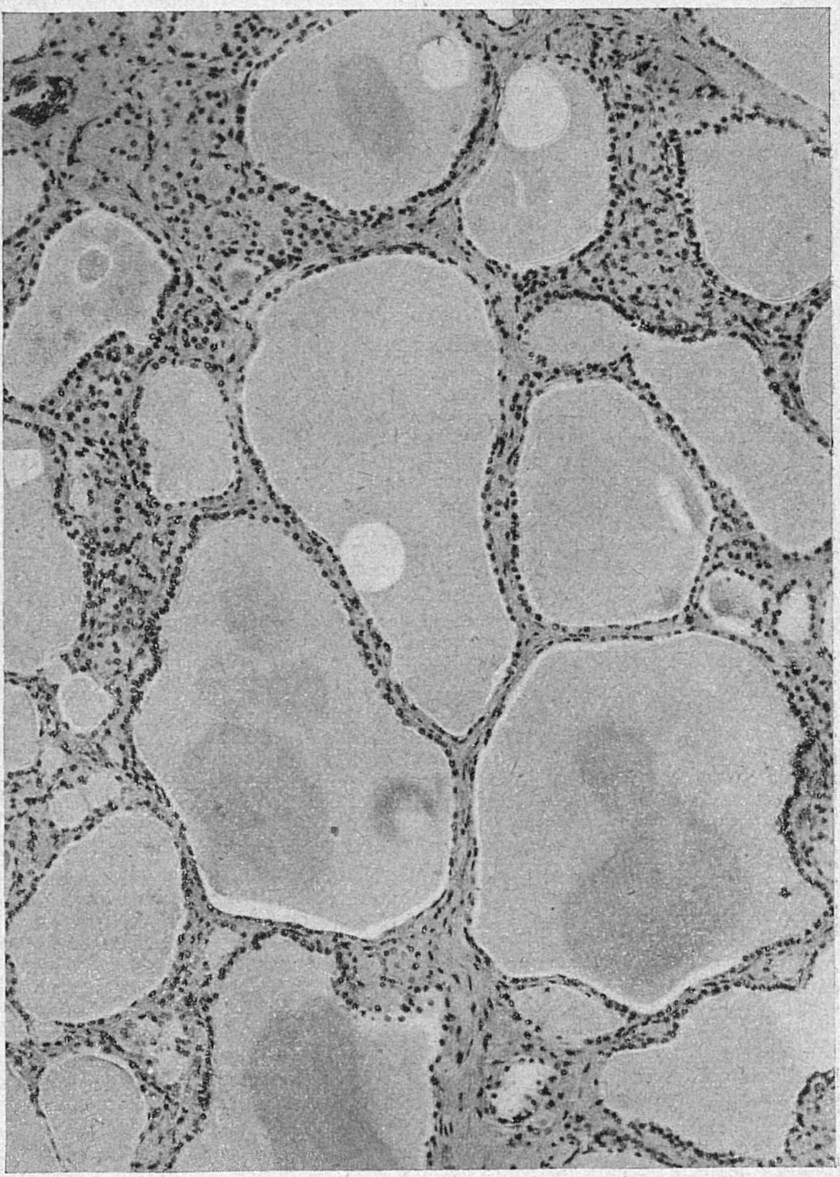


Fig. 1. Normal thyroid

ones. As witness to this there was no considerable increase in thyrotoxicosis in the population during the recent war. In peace time, however, when we have little things to annoy us, the thyrotoxic patients appear in large numbers. The patients nearly always tell you that little things worry them very much, they are restless and irritable and this irritability is often the first sign, at least to their relatives, that something is amiss.

That there are factors connected with pregnancy and childbirth is incontrovertible, but as a general working rule thyrotoxic patients do not become pregnant nor pregnant patients thyrotoxic. Pregnancy is very good treatment for thyrotoxicosis and it is a pity it is not more often possible to suggest it.

There is another point ; thyrotoxicosis varies in different individuals. An observer on the other side of the Atlantic wrote, " We do not all look alike when drunk nor when thyrotoxic."

How do we make the diagnosis of thyrotoxicosis ? We make it on signs and symptoms which I shall not recite, with the assistance at times of laboratory investigations. One of the most useful of these is the basal metabolic rate, which must be taken at least twice with a patient who has not had it done before. The serum protein-bound iodine is also useful, because whatever is responsible for thyrotoxicosis, be it thyroxin or an allied substance, is bound to the protein in the blood.

The response of the patient to the therapeutic test, the exhibition of iodine or thiouracil, may also be helpful. The sleeping pulse rate is of considerable importance and it is wise if the patient is in hospital for observation and investigation to get the sleeping pulse rate and the day pulse rate shown in different colours on the chart so that this feature can quickly be assessed. The thyrotoxic patient's pulse remains rapid even when asleep, whereas the patient in an anxiety state tends to have a slower pulse when asleep than when awake.

In this particular patient you can just see a fulness in the neck which corresponds roughly to the outline of the thyroid gland. There is a popular misconception that thyrotoxicosis can occur in the absence of a palpable thyroid gland, but it is extremely unlikely.

The next patient shows the difficulty of distinguishing primary thyrotoxicosis from secondary. She has, in fact, a primary diffuse enlargement of the whole gland, and I would draw your attention to the fact that she has the eye signs of primary thyrotoxicosis, including an absence of wrinkling of the forehead, but the goitre is asymmetrical. However, it is unjustifiable to call it nodular for this reason alone. If you examine a thyroid gland in the ordinary subject you will find that there is a discrepancy in the size of the two lobes.

Here is another apparently asymmetrical enlargement of the thyroid, which was in fact a primary toxic goitre. The patient had been treated by thiouracil for some considerable time, which is a goitrogenic agent, explaining the thyroid enlargement.

THIOURACIL THERAPY

Thiouracil is a particularly useful agent in the treatment of hyperthyroidism and the number of thiouracil preparations which have been used is fairly considerable. We have been forced to use methylthiouracil, because propylthiouracil has been difficult to obtain, but manufacturers are producing the latter now and it has the advantage of producing less side-effects.

The first slide reminds you of the normal structure of the thyroid (Fig. 1). This contrasts with the gland of a patient who died of thyrotoxicosis before the days of thiouracil and other antithyroid substances (Fig. 2). The contrast is quite striking. There is no colloid ; the vesicles contain a thin, almost mucinous, material which is rich in thyroxin ; it looks like an active gland which has almost burnt out. Fœtal thyroid tissue is in many ways intermediate. It shows areas where vesicles are opening out. It looks as if the tissue were solid and the chromatin in the nucleus is fairly evenly distributed. Oddly enough, however, the histological picture is similar to that produced by excessive thiouracil therapy (Fig 3).

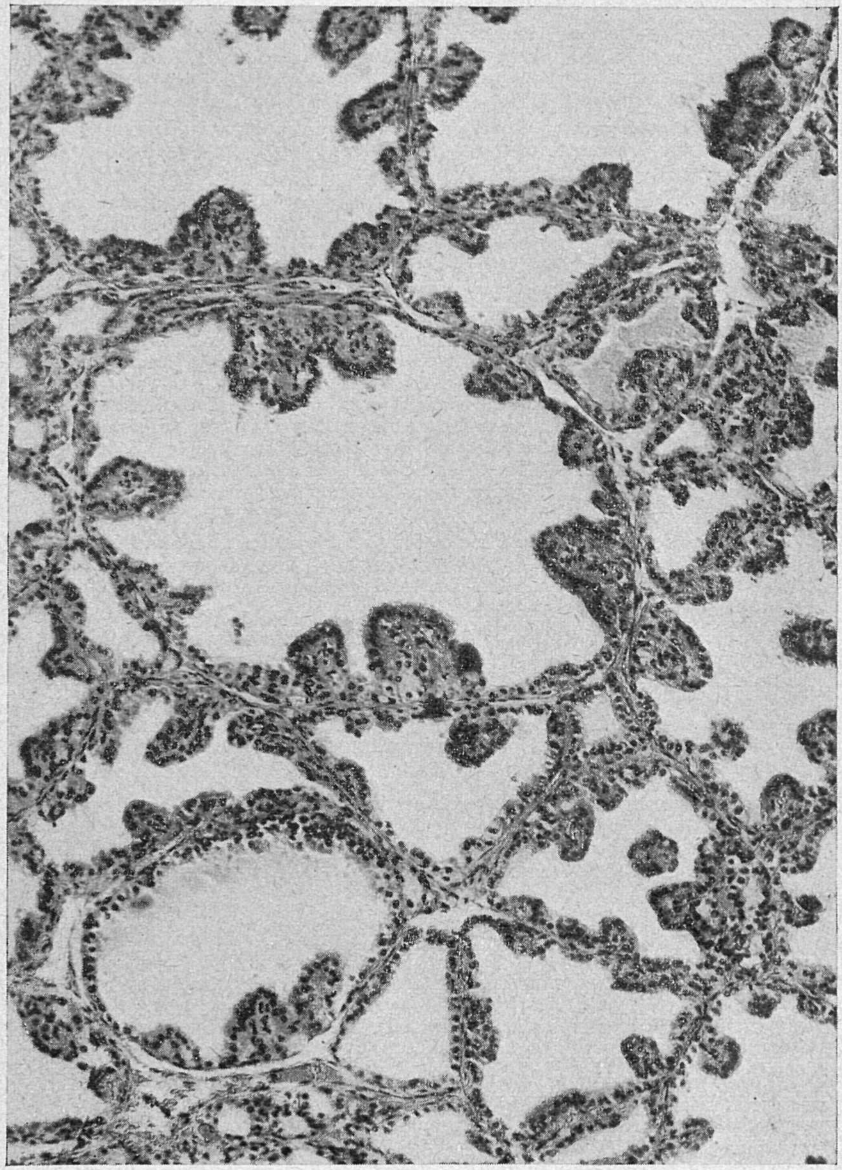


Fig. 2. Thyroid in Graves' Disease untreated by iodine.

Thiouracil interferes with the synthesis of thyroxin, and given to patients with primary thyrotoxicosis reduces the B.M.R. by about 1% per day. In nodular goitre, on the other hand, it only goes down by about ½% per day, because there is a good deal of thyroxin present in the distended vesicles of the gland which gets into the blood stream.

What are the side effects of thiouracil ? The one to which I would draw particular attention is leukopenia, but this is a characteristic of the untreated thyrotoxic state, which responds to thiouracil. Indeed, leukopenia is characteristic of thyrotoxicosis and it will be corrected by control of the thyrotoxicosis. That does not absolve you, however, from doing the white cell count approximately every ten days in patients taking thiouracil.

The other side effects of the drug are fever, skin rashes and enlargement of the salivary glands. The total incidence of these with the original thiouracil was far higher (13%) than with methylthiouracil (6%) or propyl-thiouracil (2%).

Radioactive iodine differs from thiouracil in two ways. The take-up of the former determines the dose and it is normal thyroid tissue which is responsible for it. Carcinomatous tissue hardly takes it up at all, and the alveolar type does so better than the papillary. In this condition, as in thyrotoxicosis, the weight of gland to be treated has to be determined and the dose adjusted to the weight of the thyroid. There is, however, nobody, even on the other side of the Atlantic, who can assess the weight of the thyroid without taking it out, and the margin of error is considerable.

Very little radioactive iodine therapy in thyrotoxicosis has yet been achieved in this country, but a number of workers in the States have treated a fairly large series of cases with the drug. The one point on which they agree is the difficulty in assessing the weight of the thyroid, and therefore of determining the dose. A number of papers have appeared on this subject in recent times, and the average dose of radioactive iodine required is somewhere of the order of 15 to 20 millicures in a primary thyrotoxicosis. The weight of the thyroid in the primary thyrotoxic patient may be three times as much as in the normal patient. A tracer dose may be given and an assessment made of the output of radioactive iodine in the urine during the next 48 hours. Later the amount of iodine taken up by the gland can be roughly determined, but it is only roughly and the error may be as much as 80% or 100%.

You may ask what are the objections to overtreating a patient with radioactive iodine and the answer is the production of myxœdema. Some figures in the literature in the last two or three years suggest that this is as high as 5% or 6%. Increased exophthalmos and aggravation of the thyrotoxic state are also occasional side effects.

If the dose of radioactive iodine is so difficult to assess and if the possible incidence of myxœdema after radioactive therapy is as high as 5%, what has radioactive iodine to offer that surgery, after preparation with anti-thyroid drugs, has not ? The answer is that the subjective control of the symptoms with drugs is not the same as the relief which thyroidectomy affords. One patient described it to me fairly well by saying that while she was taking thiouracil she felt " damped down " all the time and after thyroidectomy she felt freer in the broadest sense of the term.

Surgery in thyrotoxicosis, of course, should be deferred until the thyrotoxicosis is controlled with iodine and propyl-thiouracil. As many as 90% of patients are then permanently improved by operation and radioactive iodine has a difficult target to beat.

What, then, is the place of radioactive iodine ? The answer, in my opinion, is in the treatment of recurrent thyrotoxicosis, which occurs in only 3% or 4% of cases after surgery. A tracer dose of radioactive iodine to determine iodine uptake by the recurrent or new thyroid tissue in the patient's neck should precede therapy by these means.

I would like to conclude, not by discussing therapy in carcinoma in general terms, but by telling you a dramatic story of a patient with a carcinoma of the thyroid. He was treated by Dr. Trunell at the Memorial Hospital, New York, and illustrated practically all the side effects of radioactive iodine. Aged 53, he presented himself in 1939 with a swelling in his neck. A biopsy showed alveolar carcinoma and there were metastases. A thyroidectomy was done

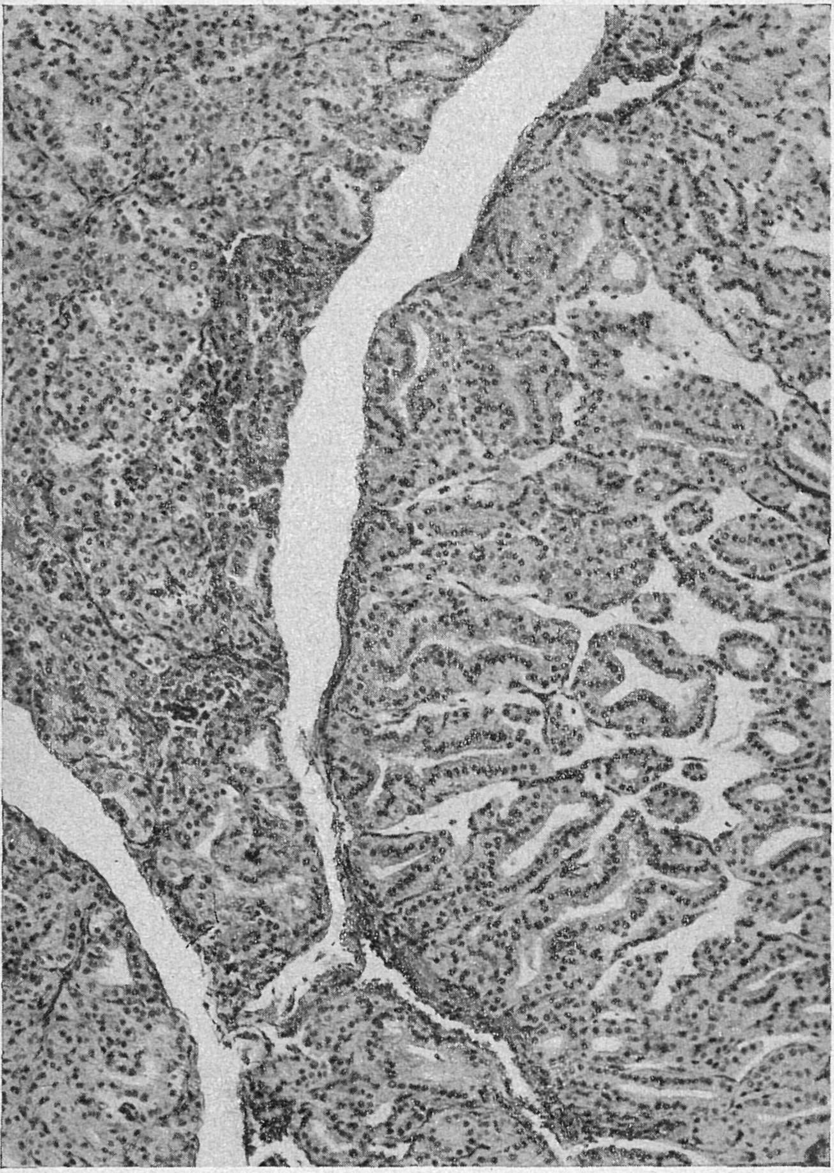


Fig. 3. Thyroid in hyperthyroidism after excessive treatment with thiouracil.

and the patient was given X-ray therapy but without response. He appeared again in 1944 and was given a tracer dose of radioactive iodine. There was no take-up in the neck or in any of the secondaries. Two years afterwards he came back weighing only seven stone, his original weight being thirteen. He was taking morphine sulphate in two-grain doses every two hours. A blood count showed 900,000 red cells with a total white count of only 1,200. He was then given 50 millicures of radioactive iodine and the result was quite astonishing. He sat bolt-upright in bed and ate continuously for forty-eight hours. At the same time his neck swelled and became very tender ; he had a tremendous tachycardia, an uncountable pulse-rate and unfortunately developed a severe œdema of the ankles and back. The serum protein-bound iodine rose to the remarkable value of 26 indicating, to put it mildly, a thyroid crisis !

After recovering from this, the man put on weight and then developed a hydrothorax necessitating paracentesis. An intrinsic carcinoma of the larynx then complicated the picture but it responded very well to X-ray therapy. This was followed by further doses of 10, 15 and 30 millicures of radioactive iodine and once again he became thyrotoxic, though not as severely as before. Propyl-thiouracil controlled it and brought down the serum protein-iodine to 8.

The next chapter describes him painting his house. In spite of that dramatic story, the doctor to whom I was speaking still said there was nothing to enthuse about in the treatment of carcinoma with radioactive iodine. " All it has done to me," he said, " is this "—pointing to his pate—" I used to have quite a good shot of it, doctor ! "

Correspondence

Hospital Management

SIR,—In Passim of your issue of 25th August, 1951 you put forward the view that the National Health Service had diminished the influence of members of the staff of hospitals as compared with that of lay members of Boards of Governors.

It might perhaps be of interest to remind your readers that until the Health Service was envisaged the Governors at Guy's, some sixty in number, included not a single member of the professional staff of the hospital, and I believe only one registered medical practitioner, the late Sir Herbert Eason. The Superintendent attended the meetings of the Court of Governors but was not himself a Governor. The control, therefore, was entirely in the hands of laymen.

If the writer of Passim were to read the National Health Act he would find that there is a statutory representation of the staff of hospitals on Boards of Governors. If he has time to go to the Superintendent's Office he can study the personnel of the Board of Governors at Guy's. He will find that at the present time, out of a total of thirty Governors, no less than eleven are registered medical or dental practitioners and of these eleven, six are members of the present visiting staff.

It is, therefore, somewhat difficult to understand on what grounds it is stated in Passim that " whereas the doctor has lost ground in control of his own hospital, the layman has gained."

Although I have referred specifically to the constitution of the Board of Governors at Guy's, it may be true to say that under the new regime the influence of members of the professional staff has been greatly increased in all hospitals. It would seem, therefore, that Passim gives a distorted picture of the present situation.

May I add that even in the days when the hospital was ruled by sixty laymen their rule was a benign obligarchy, which tried to satisfy the requests of the medical staff so far as finances allowed. Today, although the medical members of the Governors are in a minority, they are in an infinitely stronger position than in the past.

You write, Sir, " politics pushes its ugly contemptible head into the realm of the healing of the sick." May I be allowed to assure you and the readers of the Gazette that this is completely untrue as regards Guy's, where all the Governors have only one object in view, the welfare of the hospital in its widest sense.

Yours, etc.,

Guy's Hospital, S.E.1. J. J. CONYBEARE.

Shoulder Presentation—A Commentary

By G. ~~L~~T. HAMMOND, M.B., B.S., M.R.C.O.G.

THE interesting case of shoulder presentation read at the 5th meeting of the Physical Society in 1803 and reprinted in the last issue of the *Gazette* suggested an inquiry into the frequency and results of this malpresentation in the Maternity Department at Guy's Hospital.

Since the introduction of the Clinical Reports in 1928 there have been 53 cases of shoulder presentation in 20,381 deliveries, giving an incidence of 2·6 per 1,000 or 1 in 385 deliveries.

Fourteen infants were still-born and there was one pre-natal death—a still-birth and pre-natal mortality of 28 per cent.

There was one maternal death following Cæsarean section in a case of disproportion, the patient dying from paralytic ileus. The maternal mortality in this series is therefore 1·9 per cent.

The greater frequency of shoulder presentation in multigravida as compared with primigravida is shown by the fact that it occurred in 44 of the former group, giving a ratio of 5 to 1.

A shoulder presentation arises as a result of labour commencing with the fœtus lying transversely or obliquely in relation to the long axis of the uterus. The fœtus becomes doubled up about its neck and thus a shoulder or part of the trunk presents over the internal os.

The analysis of the present series indicates that the presentation arises in two types of case.

1. Where the head is prevented from engaging in the pelvic brim on account of disproportion, placenta prævia or a pelvic tumour.
2. Where there is increased mobility of the fœtus as in hydramnios, twins, prematurity and a lax abdominal wall.

Primigravida. 9 Cases.

		Still Births
Twins	3	0
Premature Labour	3	1
Disproportion	2	0
Placenta Prævia	1	0

Multigravida. 44 Cases.

		Still Births
Twins	7	2
Premature Labour	6	3
Disproportion	3	0
Placenta Prævia	10	2
Hydramnios	1	0
Lax Abdominal Wall	16	6
Cervical Fibroid	1	0

The danger to the mother of an uncorrected shoulder presentation is obstructed labour, the patient dying from exhaustion or from rupture of the lower segment of the uterus as a result of uterine contractions alone or by an injudicious attempt at version after the fœtus has become impacted in the pelvis. In cases of impaction, now happily rare, the fœtus is always dead, but the hazards to the fœtus are still great even if the malpresentation is corrected early in labour. The high fœtal mortality is due to the necessity of converting the shoulder presentation into a breech and the greater opportunity for the cord to prolapse.

It is important to note that a third of the cases of shoulder presentation occurred in patients where a lax abdominal wall was the only abnormality and this same group of cases accounted for approximately half the total still-births.

Ideally the treatment of a shoulder presentation is its prevention. It is not uncommon to find a transverse lie at 32 weeks on account of the small size of the fœtus but it should always be corrected.

If a transverse lie is found on repeated examinations after correction and more particularly in the last four weeks of pregnancy, the patient must be investigated to exclude any serious cause, placenta prævia, disproportion or pelvic tumour.

In a multigravida in the last month of pregnancy where no serious abnormality is present and the head can be made to engage, it is justified to rupture the membranes with the head presenting and so initiate labour. The application of an abdominal binder in these circumstances may assist in maintaining the presentation as a vertex.

The high incidence of shoulder presentations in otherwise normal multigravida (16 out of 53 cases) suggests a failure in ante-natal care and serves as a reminder of the importance of adequate supervision of the mother during the latter weeks of her pregnancy.

It may be recalled that when a shoulder presentation does occur, the head and breech of the fœtus are found lying on either side of the lower abdomen. On vaginal examination the characteristic feature is the feeling of ribs. Sometimes, however, it is difficult to be certain which part of the fœtus is presenting, because it may be situated high in the pelvic cavity. The examination must then be repeated with the patient under an anæsthetic.

The management of shoulder presentation in the present series was as follows :—

		Still Births	
External Version	5	0	
Bipolar Version	9	4	44%
Internal Version	20	7	35%
Cæsarean Section	17	1	6%
Spontaneous Evolution	1	1	
Decapitation and Extraction	1	1	

External version is usually impossible on account of the uterus being in labour and the muscle tone thereby increased.

Spontaneous delivery of the fœtus by expulsion, (as described in the case read before the Physical Society), or by evolution, is rare. The fœtus must of necessity be small to allow for the head and trunk or breech and trunk to pass through the pelvis at the same time. Delivery by decapitation and extraction when the fœtus has become impacted is also a rare occurrence and there has been only one case reported in this series.

The usual management, therefore, of shoulder presentation in labour is to treat it as soon as possible before impaction has occurred, either by turning the presentation of the fœtus into a breech by bipolar or internal version or delivering the child by Cæsarean section.

The type of version performed depends on the dilatation of the os, but whatever method of podalic version is employed it carries with it a risk to the fœtus of the order of 40 per cent.

In the present series Cæsarean section has nearly always been performed in cases complicated by placenta prævia, disproportion or pelvic tumours. It can be seen that in these cases the fœtal mortality is very much reduced (6 per cent.). This lowering of the fœtal mortality might be held as a good reason for the use of Cæsarean section in all shoulder presentations and indeed a more liberal employment of the operation has been advocated by some authorities.

In the series under review the maternal mortality following Cæsarean section is 1·9 per cent.

It is obvious, therefore, that very careful consideration of all the factors involved must be made before deciding on this method of delivery.

From the results in this series of 53 cases of transverse lie in labour it is not out of place to emphasise again the need for greater vigilance in the case of mother having her third or fourth child. It is only in this way that a reduction in the fœtal mortality in cases of lax abdominal wall can be prevented, while at the same time not increasing the hazards to the mother above those associated with a normal vaginal delivery.

Guy's 1890-1895—Some Reminiscences

By STANLEY COPLEY, F.R.C.S.

IT was as a Ward Clerk in 1892 that I remember H. G. Howse. He was a short, square-rigged man in the fifties with a large, rather pallid face,. bald, a short greying, dark, bushy beard and moustache, cold grey eyes and a stern look. Under animation this sternness dissolved with a charming smile and a twinkle in the eye. He dressed as was customary then, in black frock coat and tall hat. Frequently he wore light yellow trousers, usually on the short side, revealing his socks above black shoes.

He arrived punctually at 2.30 p.m. at the St. Thomas's Street entrance and was met there by his House Surgeon and " firm." (Dressers and Ward Clerks). In those days as one entered Guys by this portal, the Front Surgery was immediate left. Here, casualties were received and those not needing warding were attended to by the dressers for the week. This Front Surgery was a bare and barrack-like room, with ward benches along the walls, a couple of cubicles with couches and a centre table on which stood dressings and lotions. Immediately behind this reception-cum-dressing room was the sister's room, then in charge of a very competent, knowledgeable old body. Whether fully certificated or not, I do not know. She was, however, the " Receptionist " and called for Dressers and House Surgeons when required.

In this Front Surgery dressings were done and catheters passed, stomachs washed out and minor fractures splinted. The Dressers commonly used their own pocket instruments, after soaking them in 1-20 Carbolic lotion. Dressings were antiseptic gauze, either Carbolic or Sal Alembroth.

Upstairs from this surgery were the sitting room and bedroom for the Dressers and House Surgeon for the week. On the table in the sitting room was a large pewter tankard, containing a couple of quarts of Findlater's Beer.

Proceeding with Howse from the entrance one went to the Accident Ward, immediate left of the steps at the end of the Colonnade leading to the Park. Here were the casualties and Howse with his Dressers, House Surgeon and usually a good following visited each bed and talked to the crowd. In those days he was a popular and good teacher and talked very learnedly on diagnosis and treatment; also on the incomplete record of the ward clerk's bed report. Fractures of lower limbs, below-the-knee, were usually done up in Croft plaster splints, fractures of the femur swung in Hogden's Splints, with an occasional McIntyre for lower quarter femurs.

The results were good, except for Pott's fractures and oblique tibiae. Indeed, Pott's fractures showed appalling results, too commonly with a permanent valgus and resulting weak foot. Hogden's gave very good results and I think it is a pity it has been discarded. For compound fractures needing dressing I think it is hard to beat. My recollection is that Pott's were exceedingly common. X-rays were not known and we had to align as best we could by measurement and touch.

From the Accident Ward we would go up the stairs by " Cornelius " ward to " Charity," the female ward of Howse' patients. There would lie excisions of hips and knees, tubercular glands in the neck, a few breast operations and cases for observation; lumps and bumps often turning out to be gummata. The ward smelt of Iodoform and Carbolic. Many dressings were done for his inspection, voluminous ones of Carbolic, Iodoform, Sal Alembroth or Double Cyanide gauze, many drainage tubes and often much pus, which was syringed away through rubber drainage tubes.

Howse had a great reputation for his treatment of tubercular joints by excision and I remember his knee joint excisions were a marvel of accurate apposition and the end results often quite good. i.e. a stiff firm ankylosis and useable limb. He was very thorough in this operation, clearing out the " pulpy " material before using his saw. By the way, his nick-name was " Pulpy," from his frequent use of that word when talking on tubercular joints. He had also a characteristic way of rolling his " R's " as they do in Gloucestershire, so that " pulpy material " sounded like " pulpy materrrial."

From " Charity " we went along the corridor to " Naaman Ward," the male ward for Howse' patients. Here one met a number of urethral cases, draining per perineum after external urethrotomy; mostly old strictures with innumerable false passages. They had been operated on by either Cock's or Wheelhouse's operations.

Howse was a magician at Cock's operation and was always delighted to be able to show his skill. With his left forefinger in the rectum at the apex of the prostate and Cock's knife in his right hand, he would expound on the skill of his predecessors, Cock and Bransby Cooper. I did not know until much later that the opening of the prostatic urethra through the central perineum was made much easier by the great dilatation of the prostatic urethra from the long-standing stricture. From the patients' point of view these operations were a great success as they soon became healthy again, false passages healed and a normal urethral passage restored. I do not know their fates later, although quite a number used to attend at the front surgery for monthly dilatation by silver catheter. There were only two kinds of catheter, the gum-elastic with stylet and the silver one.

Howse was good at the gum-elastic catheter and in prostatic obstructions used to bend the tip of the catheter with the stylet into a small L, introduce it as such and when he met the prostate to withdraw the stylet one inch and pressing down on the tilted tip, usually got into the bladder. I often used this method before the coudé and other shaped catheters came into use and I found it very successful.

The ward also contained another collection of Howse' knee and hip excisions and a good many pile operations. Howse invariably used the clamp and cautery for these pile cases with quite good results temporarily, but I can remember a few bad anal strictures and one case of severe haemorrhage. This haemorrhage case was a lesson to me as I was his House Surgeon at the time and quite failed to stop the bleeding. On application to Howse at his home I got this advice. Since this man had a " hob-nailed " liver I was to take out all my plugs and give him a grain of calomel every hour until the bleeding stopped. It worked—to my astonishment!

Prostatic obstruction was treated by catheter only and I had then only a vague picture of the state of affairs inside the bladder. I do not remember ever seeing in my student days a demonstration of the pathological prostate, either in the dissecting room or in the post-mortem room. It was only after Frere published his method of prostatic enucleation and I had done a few by this method that the picture was clear in my mind.

As an operating surgeon, Howse was the pioneer at Guy's of Listerian (antiseptic) surgery and its use was a great advance on previous surgical results, but there was yet a great fear of abdominal surgery; to open the abdomen and to open the peritoneum was a dangerous operation. Not until Frederick Treves recorded his appendix operation did the older surgeons respond by undertaking open operation in abdominal crises. Colotomy was done by the lumbar operation to avoid opening the peritoneum and strangulated hernia done by dividing the " constricting ring " with a guarded bistoury to avoid opening the sac.

To proceed now to the operating theatre. In 1892 there was only one, on the second floor, opposite " Naaman " ward. It was horse-shoe shaped with rows of seats for students, and in the well, a solid operating table on which the subject lay. It was indeed a duplicate of the anatomical theatre in the dissecting room block. The back of the theatre opened on to a corridor and, directly across this, was the surgeons' dressing room. Here, surgeons washed and changed their good frock coats for old ones for operating in. Howse used then to vaseline his hands before entering the theatre.

In the theatre on the surgeon's right was a carbolic spray, and trays of surgical instruments, lying in 1-20 carbolic. A man named Coles was in charge of, and supposed to keep all the instruments in good order, especially the carbolic spray. This spray was the curse of the Ward Clerk's life, as it was his duty to see that the spray was so directed, throughout the operation, that it played on the operation field and not in the operator's or House Surgeon's faces. Frequently the wretched thing would go wrong and shut off steam.

Wounds were roughly coapted by deep salmon gut sutures. Haemostasis was not absolute, but adequate, and sufficient gaps in the wound were left for drainage. A copious dressing of gauze and wool soaked up the discharges. For big operations, either Mr. Bird administered chloroform with a Junker's inhaler, or Dr. Silk gave A.C.E. in a cone. Local anaesthesia was not used. Anaesthetic deaths were rare. I only remember one and that was a thyroid case.

After finishing as a Ward Clerk I returned to the Anatomical Department, in preparation for the primary F.R.C.S. after another six months. At the end of this, in 1893, I was appointed as Ward Clerk in the medical wards, under Dr. Pye-Smith; three months with him and three months with Dr. Fred Taylor.

Pye-Smith was a dear old-fashioned gentleman, who used the wooden stethoscope and was a martinet for accuracy. The percussion sound was either dull or resonant. There was no " ish " about it and the same with cardiac bruits. There was either the bruit or there was not. He was fond of giving us his experiences in short pithy sentences like this:

" Slow pulse, large belly, large pupils, Typhoid."

" Quick pulse, small belly, small pupils, Typhus."

or another:

" Large white man, with large white kidney."

His teaching, both diagnostic and therapeutic, was good and I have always felt grateful to him for the knowledge I gained as his Ward Clerk. Freddie Taylor was quite different and would frequently talk over our heads. If one got him on an obtruse nerve case he would spend three quarters of the afternoon on it, to the despair of the House Physician and the ward sister. His knowledge of medicine was profound, but I do not think I learnt as much from him as from Pye-Smith. Of course, he was the author of Taylor's text book on medicine.

One of the commonest female complaints was chlorosis, an anaemia now rarely seen. It was fortunately amenable to iron. It was supposed to be due to constriction of the liver by tight lacing, then in fashion with the female sex. I do not remember seeing it in a male.

After the medical appointment I went as Dresser to Mr. W. H. A. Jacobson for three months. Here I met a most colourful personality, a neatly dressed, dapper little man in morning coat and pin-striped trousers. He was clean-shaven and wore a top hat on the back of his head; walked hurriedly, with his head well in front of his body. He was nick-named " Pom," from his somewhat pompous manner, but he was always the perfect gentleman and courteous to all, especially the ward sister. He suggested a Bishop or an Oxford Don. He also was a Listerian surgeon, but in my time he did not use the carbolic spray. I think he was in a transitional stage between the antiseptic school and the new aseptic technique. When one worked with him there was the feeling of being in a hurricane, with thunder in the background. He was very quick and energetic and expected everyone else to be the same. He was kindness itself to those he liked, but could be very caustic to others.

He had a few beds in " Naaman " and " Charity " wards and, as one of the Assistant Surgeons, he shared the wards of " Patience " and " Samaritan," devoted to septic cases, like erysipelas and anthrax. He evidently had a reputation for tongue operations, for my recollection of working with him is mostly of partial or complete excision of the tongue for epithelioma. They were nasty cases, although operated on with great skill, and the after-treatment was most distressing for the House Surgeon and the Dresser—foul breath, steam tents and too often septic bronchial pneumonia. The Assistant Surgeon attended to out-patients in the " Hunt " block, (entrance from Maze Pond) twice a week and here, tonsils and adenoids and small operations were done. The Assistant House Surgeon attended with the Assistant Surgeon and carried on in his absence. Tonsils were guillotined and adenoids scraped with the finger nail.

From Assistant Surgeon Dresser, I passed on in the latter part 1893 and early 1894 to full Dresser to Mr. Clement Lucas. He was away ill for the first three months and Arbuthnot Lane, his Assistant Surgeon, was doing his ward work. Lane was a tall, gaunt man with grey eyes and usually dressed in grey frock coat and trousers. The first impression conveyed that he was weary and tired. He moved slowly and was not very conversational unless you tapped one of his special subjects. He was the introducer of the aseptic technique to Guy's and his Dressers and House Surgeons were readily recognisable by their very short finger nails and tender finger tips. Much scrubbing and disinfectants were the cause of this, as it was now accepted that the cause of suppurating wounds was introduced by the skin of the operator and assistants. Rubber gloves had not come into use.

As an operator, Lane was the acme of neatness and precision. He preferred to sit at his operations, with his instruments spread out within his reach, so that he seldom had to ask for one. Rarely would he touch a wound with his fingers, but with an instrument. Incisions were clean cut and through the deeper tissues there was dissection and no rough handling. Haemostasis was absolute and his tissues were united accurately, first with salmon-gut mattress sutures, protected with rubber, and secondly with a fine salmon-gut or horse-hair continuous sutures. Dressings were of sterile gauze and small in size. He must have saved the hospital pounds by this economical dressing. Surgery with him became a pleasure to watch and to perform. Results were amazingly good and if by chance there was a case with any sign of sepsis after his operations a veritable " witch hunt " took place to track down the culprit. Intra-abdominal surgery was very common and Murphy's buttons were in use for intestinal anastomosis. These buttons were a source of anxiety. Would the buttons pass the ileocæcal valve or not?

Lane was very difficult about diagnosis. Of an interesting abdominal case he would say: " It's obvious we had better look and see what is inside. Take him to the theatre." At this time, 1893, he was revolutionising the treatment of fractures by open operation and his teaching of the function of the fibula as brace-bone to the ankle-mortice and the excellent results he produced by the strict re-alignment of the fibula in Pott's fracture were making the surgical world quake. It was then considered an unjustifiable risk to convert a simple into a compound fracture. Lane used his own special metal levers to get the fractured ends into position and used silver wire to keep them there. Sometimes, but rarely, this wire would give irritation and would have to be removed. He plated his oblique tibiæ and femurs, using his own designed clamps and cramps to perfectly aligned parts before plating. In spite of the fact that I saw him do many femurs, I did not realise one important detail, until I was doing them myself, namely, not to let the lowest screw enter the epiphysis in young adults. Generally speaking, one learnt more by watching Lane then by listening to him, but sometimes he would let himself go if one got him on a pet subject. For instance, the distribution of the weight through the normal body, the curves of the spine and the abnormalities that arose from mal-distribution, especially as this affected occupational ailments. He used to postulate that " Constant pressure atrophied and intermittent pressure caused hypertrophy of bone." He was interested in " vestigial remains " and showed great knwoledge of comparative anatomy.

After my time I read he went " hay-wire " over the colon and recommended its total removal in certain conditions. I saw a few of these victims afterwards and was not very impressed with the benefits they had received from the operation.

Clement Lucas returned to work in the latter part of my Dressership and whether because he found his " firms " thoroughly soaked with Lane's technique, or because he himself had been converted, there was no change. Lucas must have had a reputation for kidney work, as my recollections are of nephrectomies, nephrotomies, nephro-lithotomies and nephrorraphies. With these he showed himself the throrough master and very instructive. He himself was a heavily built man, but with very fine hands. He dressed well and reminded one of a successful stock broker.

After qualifying in 1894, I became House Surgeon to Howse in 1895. Even with him, surgery had changed since my Ward Clerk days. The carbolic spray had gone and the treating of tubercular joints modernised. I do not think H.G. liked it altogether, but when I was his House Surgeon we carried out the aseptic method, though I am afraid " laudable pus " used to occur occasionally, to our horror. However, H.G. did not get upset about it. I remember him saying that a little " laudable pus " in a radical cure of hernia produced a firmer scar and a better result !

The old man was then far from well and I think it irked him that he was no longer a leader in surgical methods. There was no longer the crowd of " hangers on " at his rounds and he rarely did much talking. His manner had mellowed and we all became very fond of him. Shortly afterwards he retired and died very soon.

These are my recollections of those years 1892-1895 when I was associated with the work at Guy's and I must record my thankfulness for the inspiration and teaching I gained at the old "Spit." I have found during my career that there is something about a Guy's trained medical man that is sound and reliable. Meeting men from other schools and universities I maintain that Guy's men showed up best. In consultation over an unusual case " other men " would quote learnedly from the literatures, but " Guys " would say " I remember a similar case in Ward X when I was at Guy's and old so-and-so used to say so-and-so about it "—a little difference that meant a lot.

Well my career is nearly over. At 75 years I can look back on an interesting and enjoyable life. Never having been bitten with the love of money making, I have made little, so all I can do to show my gratitude to Guy's is to hope that the new National Health Scheme will not interfere with the wonderful education of medical men, which keeps up the high standard of the name " Guy's man."

Hospital Information, etc.

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PASS LIST

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PAPERS BY GUY'S MEN

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CHANGES OF ADDRESS

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R. G. Walton, M.B., B.S., Dept. of Dermatology, University Hospital, University of Michigan, Ann Arbor, U.S.A.

BIRTHS

EMERY.—On July 20th, 1951, at Guy's Hospital, to Beryl (née Davis), wife of L. L. Emery, Esq., a daughter (Megan Katherine).

GRABASKEY.—On August 19th, 1951, at The Drive, St. Ives, Hunts, to Jean, wife of H. E. P. Grabaskey, L.D.S., R.C.S., a sister for Jane.

RUBEN.—On August 22nd, 1951, at Hampstead, to Dr. Joan N. Ruben (née Mackover), wife of Cecil M. Ruben, D.O.M.S., a daughter wife of Cecil M. Ruben, D.O.M.S., a a daughter.

MARRIAGES

ELLIS—LANGTON—On September 1st, 1951, at St. James' Church, Friern Barnet, Frank Groves Ellis, M.B., B.S., to Sheila Daphne Langton.

HASLETT—ATTREE.—On August 18th, 1951, Henry George Haslett, A.L.A.S., of Nottingham, to Dorothy Millicent Attree, S.R.N., of Lynton, N. Devon.

RUSSELL—HATTON.—On September 4th, 1951, at St. Mary's Church, Ladywell, Patrick Russell, M.B., B.S., to Maureen Hatton, S.R.N.

Eds. R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

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PASSIM

One lesson, Nature, let me learn of thee,
One lesson which in every wind is blown,
One lesson of two duties kept at one
Though the loud world proclaim their enmity—
Of toil unsevered from tranquillity,
Of labour, that in lasting fruit outgrows
Far noisier schemes, accomplished in repose,
Too great for haste, too high for rivalry!

* * * *

MATTHEW ARNOLD.

WE doubt if any body of men preach the value of rest and relaxation more often than doctors . . . or practice what they preach more rarely. Nor is it surprising, for, if doctors see the damage wrought by continual stress upon the human frame more clearly than do others the very nature of their calling makes it impossible for them to avoid such stress falling upon themselves. They are at the constant beck and call of every sick person. No doctor worthy of the name refuses to see a sick case because he himself is tired. Calls at meal times, calls in the night or at any other time must be answered. And yet there comes a time when to answer further calls can only result in life becoming intolerable and the standard of medicine low. Certain it is that if modern invention and research have advanced medicine more in the last fifty years than in the previous five hundred the pace at which modern medicine must be practised has minimised the benefits of much of this advance. Probably many good consultants would agree that if a good general practitioner (with thirty or forty cases to see in a two-hour surgery) were to change places with himself (with ten or twelve out-patient cases to be seen in a whole morning) the standard of medicine practised in both places might not vary so very much, for time, patience, care, thoroughness and thoughtfulness are the very essence of good medicine. Indeed we have often noticed that the doctors whose work we most respect are just those who seem to be in the least amount of hurry. It was not long ago after a busy surgical out-patients, at 1 o'clock, just as everyone was preparing to hurry off to lunch that a certain Guy's Surgeon to whom a child with a limp had been brought in late, aptly remarked, as he sat gazing at the child's slightly wasted thigh, " Gentlemen, you must not hurry ; you must give yourself time to notice things ; you will never make a good diagnosis in a hurry." Yet hurry and more hurry seems to be forced upon everyone—from the student with his well-nigh endless series of lectures to fit in with his practical work—to the Resident with a dozen claims upon his time, and to the Specialist with Examination Boards, Out-patients, Teaching Rounds, Operations, Committee Meetings, all crowding in one upon the other and crowding out all time for thought, reflection, reading and contemplation.

Everyone knows the stock answers to the problem. Less routine work, more assistance, fewer forms to sign, etc. Yet much more important, we feel, is the development of an unhurried approach—an approach, rather, which makes us refuse to hurry or to be hurried and which enables us to do our work steadily and methodically in an atmosphere of calm. After all, Nature, with whom we have to deal in our work, seldom hurries. The conclusion of Matthew Arnold's poem may seem apt :

Yes, while on earth a thousand discords ring,
Man's fitful uproar mingling with his toil,
Still do thy sleepless ministers move on,
Their glorious tasks in silence perfecting ;
Still working, blaming still our vain turmoil,
Labourers that shall not fail, when man is gone.

Presidential Address

By E. B. DOWSETT, *D.S.O.*, *T.D.*, F.D.S., M.R.C.S.Eng., L.R.C.P.
Presidential Address delivered at the Annual General Meeting of the British Dental Association, London, Tuesday, 3rd July, 1951.*

IT is with great humility that I rise to speak to you as President of this Association. I do thank you, however, most sincerely for giving me this great honour, and I will do my best to uphold the dignity and traditions of this Chair.

I dislike politics and have taken but little part in the upheavals in the dental world over the last few years, though, of course, I have followed them very closely, and all honour to those who have so bravely borne the brunt of the negotiations and the frustrations. But I have always been interested in the matter of the prevention of dental disease and of the education of the public thereon, in which latter we are lamentably much farther behind in this country than is the case in some others. Therefore, I propose to speak to you on these matters, about which you probably know most already, with the possibility that a little enthusiasm may be instilled in some to further the ideas I mention. I shall speak in simple words for, like Shakespeare's Marcus Antonius :

> " . . . I have neither wit, nor words, nor worth ;
> action, nor utterance, nor the power of speech,
> To stir men's blood : I only speak right on ;
> I tell you that which you yourselves do know."

Dental disease is a disease of civilisation, and is the most prevalent of all diseases of practically every civilised race. Just to take two examples of the prevalence in this country—the examination of recruits during the recent war showed that 97 per cent. required dental treatment, and only 14 per cent. had received any conservative treatment at all. Then again, under the old National Health Insurance scheme, 90 per cent. of the money spent was on extractions and dentures. Therefore, is it not high time to try to stop, or at least lessen, this terrible destruction and thereby, in time, to lessen the drain on the National exchequer which, at present, the country can ill afford ?

If the causes of dental disease could be found, it might be possible to find the antidotes, and I believe that dental disease is largely preventable. There are, however, some well-established facts, and if more notice were taken of these, both by the profession and the public, we might be on the way to a considerable diminution of dental disease. I do not propose to recount all the theories of the causation of dental disease, for I should have to go all the way, so to speak, from sucking sweets to the endocrinological hypothesis. But there are a few about which there can be no dispute, and prevention of disease, if in our power, must be our perpetual aim.

Wartime Decrease in Caries

During both of the world wars, it has been definitely shown, by undeniable statistics, that caries decreased considerably in all children of school age, not only in this country, but in many others, and that the incidence increased again gradually when each war ended. During the first world war, the causes of this were not very fully investigated but, during the recent war, more care has been taken in this respect.

It has for long been recognised that dental diseases are influenced not only by local or environmental conditions, but also by nutritional factors.

Toverud, in Norway, made searching investigations, about 9,000 children being examined over the period 1940 to 1948, and an investigation on such a vast number of children must warrant our most careful consideration. The caries incidence in these children was reduced during the war years from 50 to

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75 per cent. Basing his deductions on the rationing of various foods—the only relevant change from peace to war—the decrease was shown to be due to the lowered consumption of refined carbohydrates, principally sweets, and the increase in consumption of the more natural foods, that is, protective foods, which may have resulted in the increased resistance of the teeth. With all these children, all the rations were less during the war, but the most marked reduction was in the sugar ration, and by the middle of the war, sweets, jams and sugared cakes disappeared completely from the market in Norway. As soon as they appeared again and the rationing of sweets and sweetened articles ceased, then caries incidence began to show an increase.

This immediate increase in caries incidence after the war was not universal in all age-groups for, in the youngest group of children up to the age of 5 years, it was found that the caries incidence was still very low for at least two years after the war, in spite of the increased consumption of the refined carbohydrates. The teeth of all these young children were being formed during the war and, therefore, it is safe to assume that the rest of the diet was so altered during the war as to have a caries-resisting effect upon the teeth during their formation, one of the main changes being the increase in the consumption of wholemeal bread and other vitamin-containing foods. In the words of Sognnaes of Boston, " It takes time to build up, as well as to break down, the resistance to dental decay in a major way." However, it is safe to say that the most pronounced change in food during the war, compared with the previous period, is to be found in the group of refined carbohydrates.

Similar investigations were carried out in Finland, with fewer children but with exactly similar results, namely, that the incidence of caries varied directly with the consumption of refined carbohydrates.

It is interesting to note in this connection that, both in Norway and Finland during the war, when the consumption of sugar was reduced by 60 per cent., and when caries was reduced by about 75 per cent., the change in the composition of the bread was very considerable, the flour being of much higher extraction rate and also much coarser in texture, because of the addition of oats : moreover, this bread did not deteriorate by keeping and had a natural and powerful detergent effect on the teeth. In Denmark and Sweden, where the consumption of sugar was reduced during the war to about the same amount as in Norway and Finland, the bread, on the other hand, was hardly changed at all, remaining white and of low extraction rate, and the caries incidence was reduced only by about 7 per cent. in Denmark and 17 per cent. in Sweden. We must assume, therefore, that the coarse texture of the bread had a considerable influence upon the caries incidence in Norway and Finland, on account of the detergent qualities and the nutritional value.

Roughage, in the form of hard and fibrous food, is absolutely essential for the natural cleansing of the teeth and gums during the process of mastication. But as civilisation, so-called, has progressed, our food has become softer by choice and by cooking, to the detriment of our teeth, gums and jaws. I shall say more about the bread question a little later.

More recently, solely as a post-war investigation, Dr. Bransby with Miss Knowles examined children in the Channel Islands, principally in Jersey, in 1945, as soon as the German occupation ceased, and again in 1947. In 1945, there was a very low caries incidence in children, aged 3 to 7 years, who had been in the Islands during the whole of the German occupation, whilst there was a very high caries incidence in those children who had been evacuated to the United Kingdom just before the invasion and had returned immediately after the Germans left. During those two years 1945–47, the diet had changed considerably, principally in the increase in sugar, jam and confectionery, the lowering of the extraction rate of bread, and a reduction in the amount of roughage in the diet. During this period, the caries incidence increased considerably in those who had never left the Islands and, therefore, the inference is just the same as in the other investigations. The numbers of children were small in comparison, but the results most significant.

Refined Carbohydrates

Much of the above has been known for many years and although some, like Sim Wallace, have preached this doctrine with loud voices, nothing has been done to alter or influence the people's diet. The special danger in the consumption of these refined carbohydrates is that they, especially all kinds of sweets, are so very commonly eaten between meals and, inevitably, remnants of these are left *in situ* on or between the teeth for a long period. With all forms of the refined carbohydrates taken during or at the end of a meal, more often than not there is no cleansing detergent with the food, and but few individuals clean their teeth after meals and, in any case, that is of but little use.

This brings us to the point—can the people's diet be controlled ? Sweet-eating, especially by children, could and should be controlled, and I would go so far as to say that if all sweet shops were prohibited by law—no doubt an impossible Utopia—then the dental surgeon's work with children would largely disappear. A point bearing on this matter is the fact that many sweets are made from glucose. Now glucose is directly and easily fermented in the mouth into acid, whereas all other types of sugar have to go through much more complicated process in the mouth to produce acid. Therefore, glucose is a greater danger than ordinary sugar. There was a time when glucose was looked upon rather as an adulterant, and was used as a cheap substitute for sugar, but about thirty years ago, or perhaps longer, the medical profession found it to be a very valuable food for certain conditions, and it is largely prescribed today, but with no advice as to the cleansing or rinsing the mouth after its use. It has now become of such popular importance that, if one buys a bottle of barley sugar, there is invariably found on the label—" guaranteed 80 per cent. glucose." I have seen many glucose-fed children with rampant caries.

Soon after sweets came off the ration in this country in early 1949, and there looked like being a shortage in the shops from rapid buying, there was a B.B.C. broadcast to the effect that as adults could now obtain sweets in unlimited quantities as far as available, these adults were asked please to give preference to the children's requirements. This, I consider, was the worst possible piece of advice ever given out as a broadcast. In addition to that, in August, 1949, whilst sweets were still off the ration, the following notice appeared in *The Times* :

" CHILDREN ONLY SWEET DAY "

> " A Salisbury confectioner held a ' children only ' day yesterday. Four people served more than 3,000 children between 7 a.m. and 3 p.m., when the supplies ran out. At times the queue, controlled by three policemen, was six deep and 200 yards long. Some waited for three and a half hours to buy up to five shillings' worth. A notice in the windows stated ' Out of bounds to grown-ups '."

This is the kind of ignorance that ought to be counteracted.

The sugar question is, of course, by no means the whole story. Sweetened biscuits, cakes, etc., all consisting of entirely of refined carbohydrates, also play their part. I wonder how many children in all classes of society, even in some cases after attempts to clean the teeth before retiring, are sent to bed with a sweetened biscuit.

Civilised man is the only animal whose dentition is not adapted to his diet or, to put it in another way, the diet of man has changed considerably with civilisation, getting softer and softer, whilst the dentition has remained practically unaltered. Therefore, after every meal, there must be a certain amount of stagnation about teeth, which may lead to dental disease.

Artificial means of cleansing the mouth and teeth, by both mechanical and chemical means, by the individual concerned, may be of some use, but only to a very limited extent, and the largely advertised tooth-brushes, powders, pastes and mouth-washes have had little or no influence on the incidence of dental disease, for the simple reason that they actually cannot do the necessary work. The advertisements which state that the antiseptics incorporated in their pastes and powders will kill the bacteria causing caries of the teeth, are just absolute nonsense, for they are far too small in amount, are rapidly diluted in the mouth, and never actually reach the necessary points.

It has often been said that sugar is an essential article of food, but man has not always had sugar, as such, in his diet, though he may have assimilated what was necessary for his well-being from other carbohydrates. If sugar is an essential, it can be given in such a way with other foods, and at proper mealtimes, as not to be a danger to the teeth. It has so often been argued that there is a craving for sugar which must be met. The craving or necessity, from a physiological or nutritional point of view, can be satisfied by the assimilation of other forms of carbohydrates, such as bread, etc., or by the greater use of sweet fruits, when available.

BREAD

Bread is often called our staple article of diet, but as is so well known, the ordinary white bread is practically pure carbohydrate, with little or no vitamins in it, and it has no detergent qualities on the teeth when masticated and, therefore, is apt to leave a sticky mass adherent to the teeth, ready to promote caries and, possibly, gingivitis. On the other hand, the wholemeal bread, and by wholemeal I mean wholemeal and not merely white bread to which calcium, synthetic vitamins and, possibly, bran have been added, is not only detergent to the teeth, but contains the natural vitamins necessary to our health and general well-being, including the structure and caries-resisting properties of the teeth.

This controversy over the wholemeal loaf of high extraction and standard quality and the white loaf of low extraction has gone on for some years, and, somewhat acutely during the late war, not the least of the exponents of the former being our revered friend and colleague, the late Sir Norman Bennett. As you all know, the white loaf is only 70 per cent. extraction. Attempts were made during the war by the Government to produce a loaf of 85 per cent. extraction, but this was done, to some extent, by adding synthetic vitamins, etc., to the white loaf. Now the white loaf is made from flour, from which the germ and the aleuron layer of the wheat grain have been removed in the process of milling. This substance that is removed from the grain contains certain minerals, nearly all the vitamin B and about half the vitamin A of the wheat, and is known by the millers as "offal." This offal is sold for the feeding of pigs and poultry, and a certain amount for cattle. It has been stated, though I cannot quote chapter and verse, that some of this offal is also sold to firms to produce a highly priced vitamin food, on sale at chemists, to supplement the lack of vitamins in our ordinary food, which we might say have virtually been stolen from us. It has also been stated, on good authority, that out of food fit for human consumption, but given to animals, we only get back about one-tenth in food value, and it appears that pigs, poultry and cattle can all be fed on other and available foodstuffs. Again, it has been shown that synthetic vitamin B1 is much less effective than the natural vitamin.

In the summer of 1949, the Federation of Meat Traders asked the Minister of Food to increase home-produced meat by raising more pigs and poultry, and it was suggested this should be done by lowering the extraction rate of flour and, thereby, releasing more feeding stuffs, namely the millers' offal, for the pigs and poultry, and by definitely stating that we were eating in our daily bread of 85 per cent. extraction some of the material that, before the war, in the days of the white loaf, helped to produce our bacon and eggs for breakfast, and our pork chops and chicken for dinner ! Some months earlier, the Minister of Food, himself, had agreed that a flour extraction of 85 per cent. was undesirably high, apparently without any reference to the nutritional experts. Those who argued for the further lowering of the flour extraction rate admitted the unique protein and health-promoting value of the offal, and that it was wanted for the pigs and poultry. But no one mentioned that the poor humans had to go without their nutritional rights.

In January, 1950, at a meeting of the National Association of British and Irish millers, the chairman was reported as saying that nutritionally there was no case against a progressive reduction of the extraction rate to 80 per cent., as there was an agreed prescribed standard of nutrients for bread. That prescribed standard, however, is not agreed by all concerned. The chairman then definitely advocated a reduction, at an early date, of the extraction rate from 85 per cent. to 80 per cent. to provide, as he said, a much better loaf and more feeding stuffs for pigs and other animals. The loaf might be lighter in appearance, but would be infinitely poorer in nutritional value.

Still more recently, a further debate on the lowering of the extraction rate of flour has taken place in the House of Lords. One argument was to the effect that the present bread was dirty-coloured, was indigestible and would not keep, the speaker remarking that this was due to the extraction rate being too high. Now the dirty colour is a misnomer. The indigestibility was probably due to the adulterations of the flour, or to the consumer's individual idiosyncrasy. The lack of keeping power is certainly due to the bakers not knowing how to cook the bread. On the other hand, during the debate, at least two noble lords brought to the House loaves of 100 per cent. extraction for exhibition and tasting, with the assurance that they had excellent keeping qualities and were most palatable. In spite of this the extraction rate was reduced to 80 per cent. in the summer of 1950.

The strongest argument against the wholemeal loaf is said to be the preference of the public for the white loaf, under the deluded impression that the white loaf is the pure food. But surely where it is a question of health and nutrition and one possible way of healping to prevent dental disease, strong propaganda should be put forth again and again to make the consumption of wholemeal bread of high extraction, even 100 per cent., as universal as possible. This might meet with opposition from the millers, for financial reasons, but if the dietitians and the nutrition experts got together, reinforced by the scientific experts of the dental profession, something could, and ought to, be done.

THE NEED FOR RESEARCH

All I have mentioned, so far, are just plain factors, which must have some influence on the incidence of dental disease and, therefore, we should consider if something can be done to counteract their baneful influence. These facts have been known for a long time, and yet practically nothing has been done to really influence the public, the profession or the Government.

It would be useless to approach the nutrition experts or the dietitians or the Government, without the scientific evidence of the professional experts. Therefore, it seems that the best line of approach would be for the research workers of the dental profession to get together and formulate a policy on these particular factors alone. It is not sufficient to leave the matter to individual workers. There should be a research committee in permanent being with the simple remit of formulating the *known* causes of dental disease and the methods to be adopted to prevent its incidence. The scientific data which they produce could then have some real influence. Since, however, the prevention of dental disease poses not only a scientific problem but also a social one, nutrition experts and representatives of the Ministry of Health would have to be brought into consultation before any propaganda, based on the findings of the committee, was put out. When agreement had been reached, very strong propaganda could then be put out, not haphazard, as in the past, but in a much more forceful manner and kept up, week in and week out, to the schools, in the Press, by the B.B.C., and to the profession for passing on forcibly at all times to their clientele,

I have laid special emphasis on the effect of refined carbohydrates, the detergent properties of certain diets and the nutritional value of some foods because in the present state of our knowledge, instruction based on these factors is more likely, than any other, to influence the mass of the public, and so to effect a reduction in the incidence of dental disease. All other means of inhibiting dental disease, with the exception of the fluorination of public water supplies, can only influence a minority and, quite likely, a very small minority of the population, for they can mostly only be used by the dental surgeon in his own surgery and, therefore, only upon those who are in the habit of making regular visits.

A great deal is now known about the ætiology and control of dental disease, but much further research is still required ; however, " Nothing is so hard, but search will find it out." There have been many theories of dental disease in the past which, when presented, have been hailed with great optimism, but which have since fallen into the background. " Falsehoods which are spurned today, were the truths of long ago." That the conclusions of scientific investigation are no more final than those of philosophers and mystics, is no reason why research should not go on. Indeed, it is of the utmost importance that it should. The proper men must be carrying on the work, and there must be co-ordination and interchange of views between them, preferably in a team, for all opinions, properly so-called, are stages on the way to truth. The evaluation of their results could then be carried out, possibly by the research committee I have suggested.

There are many problems yet to be solved, and I will mention only a few. Great stress has been laid recently on the topical application of sodium fluoride. A working party on this matter was set up some time ago to investigate amongst a large number of school children, and we are awaiting the results of their labours.

With regard to the structure of the teeth and its caries-resisting properties, many things have to be considered and further investigated, such as, firstly, the effects of various diets, including the diabetic diet, on children and expectant mothers ; secondly, breast feeding and the effects of its prolonged use ; thirdly, the effect of various vitamins, either natural or added, in the foods ; and, fourthly, the histopathology and biochemistry of the teeth.

As to the environmental conditions, apart from what I have mentioned above, there is still much work to be done on the bacteriology of caries and its control—including the drugs to reduce the *bacillus acidophilus*, etc.—such as the effect of urea and dibasic ammonium phosphate. Or again, the possible effect of enzyme inhibitors with carbohydrates and whether proteolysis has anything to do with the process of caries.

These are some of the problems to be solved.

When I think of research workers, I cannot help thinking of some words of Rudyard Kipling :

> " I keep six honest serving men,
> (They taught me all I knew) ;
> Their names are What and Why and When,
> And How and Where and Who."

May those be the watchwords of all research workers, and my plea is for more of them and for more and greater subsidies to support them.

Happy is he who is able to find out the causes of things, but the causes have a most unkind way of receding from the grasp of the research worker, aften just as he seems about to discover them. It would be unwise to fall into the error of all prophets by looking into the future, but, nevertheless, I am convinced that eventually dental disease will at least be very greatly diminished though not completely eliminated.

Writing in unpractised hands, such as mine, is often saddening, and I trust I have not made you who are listening to me too sad. I am fully conscious of my clumsiness in what I have written and now have read you, but I trust you will forgive me when I say that I am sincere in trying to put in my small word for the possible benefit of the community, even if it is but a very small word. To conclude in the words of Tennyson, I feel like :

> " An infant crying in the night,
> An infant crying for the light,
> And with no language but a cry."

May my cry be heard somewhere, sometime !

RETIREMENT

On 7th July, 1951, an old Guy's man, Mr. W. H. Miller, M.D., F.R.C.S., retired from the position of Senior Consultant Surgeon at the Bedford General Hospital. On this occasion Mr. Miller was presented with a set of George III silver candlesticks and an English antique bracket clock. In the address which he gave following the presentation Mr. Miller referred to his pride in his old Hospital—Guy's—and many of its old traditions, particularly to the traditional relationship between surgeon and house surgeon which he counted amongst them.

Reflections on Guy's

By TERENCE PARRY

DR. VERTUE'S article in your issue of 11th August draws a glowing picture of the future possibilities for the Guy's preclinical students to enjoy this period amidst the surroundings and atmosphere not only reminiscent of, but " more enlightened than that of Oxford and Cambridge." Dr. Vertue does not go so far as to pursue the suggestion that the clinical departments might in some measure also find themselves one day looking out upon vistas of ripening corn and green trees, with the convalescent patient sitting by the river or in the shade of the copse instead of looking upon begrimed bricks and mortar.

How would this affect the student ? With the opportunity for the natural pursuits described by Dr. Vertue continued through to his final year, would he be in a better position to appreciate the fullness of life enjoyed by the country practitioner ?

Each one of us as final year students and later as housemen is conscious that on leaving Guy's and London we are severing ourselves from those very " Scientific meetings, large libraries and committees " of which Dr. Vertue speaks and, thus cut off from those sources of reference and revision, fear that our standards of practice and opportunities for keeping pace with advances may suffer.

Once in the country, however, we find that though our fears are to some extent justified, they are nevertheless tempered by " those benefits Nature can bestow."

The countryman has a philosophy and a culture of his own. He is accustomed to watching the fruit ripen and the leaves fall and he accepts the inevitable with equanimity. There is nothing artificial about him. The shepherd and the cowman know something of the twenty-four-hour day.

Those natural pursuits are on every hand. Returning at dawn from a " midder " in a distant farmstead the day may be made by seeing a fox on the edge of the wood or by hearing the spring song of the first warblers. Each visit to a certain cottage will have the added pleasure of stepping a dozen paces off the path across the field to turn aside a clump of stinging nettles and observe the progress in a clutch of young partridges.

At another season the combine is already cutting in the field at the bottom of the garden as you go out before the morning surgery to dig the day's potatoes from one's own vegetable plot.

" To watch the corn grow, and the blossoms set ; to draw hard breath over ploughshare or spade . . . —these are the things that make men happy."

LAMENT

Never to sight the Dutchman
In the gamble round the Horn,
Yardarm braced to backstay,
Lurching to her leeway
With the lowery lift of dawn.

Never to see the Frenchman
By some rosy light of Fate,
All her canvas drawing,
Pearly with the morning
In the Trade Winds off the Plate.

See the barquentine from Bristol,
Or hear the dog-watch bell
Across the purple water ;
Wind upon her quarter
On the long Pacific swell.

J.C.D.

Memories of Guy's

By A. R. THOMPSON, F.R.C.S.
Consulting Urologist, Guy's Hospital.

I. THE SURGEONS AT GUY'S HOSPITAL IN 1898

> " The far off whisper of the years
> Scarce reaches our bewildered ears."
> *Aeneid of Vergil*, Conington's translation.
>
> " Ad nos vix tenuis famæ perlabitur aura."
> *Aeneid*, Book VII, 646.

IT was in October, 1898, that I first entered Guy's Hospital. At that time the surgical staff comprised four full surgeons—Howes, Davies-Colley, Lucas and Golding-Bird, and five assistant surgeons—Jacobson, Symonds, Lane, Dunn and Fripp. The last-named who, it was said, owed his recent advancement to the influence of the then highest gentleman in the land, was also senior demonstrator of anatomy. Lucas and Dunn were the lecturers on this subject. Fripp was a good teacher, but the plan which he adopted of imparting knowledge was most laborious. He required plenty of black-board room and plenty of chalk, for he wrote on the board practically everything that he said. He already had a good practice and had recently attended the Prince of Wales, afterwards King Edward VII for fracture of the patella. Fripp's treatment was highly satisfactory, but I fancy that the fragments were not separated widely, if at all, owing to the integrity of the lateral fibrous expansions from that bone on the front of the knee-joint.

The senior surgeon, H. G. Howes, had made a great name as a pioneer in the operation of excision of the knee-joint for tuberculous disease. He had studied the principles of antisepsis as originally formulated and practised by Lister at Glasgow. Howes introduced to Guy's the carbolic spray, an engine which covered the wound and adjacent skin with the vapour of carbolic acid. In order that his hands might be protected from the very irritating vapour, Howes used to smear them with vaseline before commencing an operation. Not until 1903 did Lane first introduce gloves made of indiarubber, the use of which is now regarded as routine practice. It is recorded of Howes that on one important occasion he found it necessary to call for a hammer and chisel for a tracheotomy, the trachea and larynx being very much calcified. As the injury was due to a homicidal cut-throat, it was quite necessary for him to get into the trachea. It was also related of him that he bought, in his early days, a roll of brown West-of-England cloth, from which he was able to provide himself with trousers for the rest of his life, though the colour did not go at all well with the black frock-coat and a tall silk hat customarily worn in those days.

Next on the surgical side in 1898 was the late J. N. C. Davies-Colley, father of a later senior surgeon. He was a very handsome man and carried a beard and, in this respect, like Howes, Lucas and Symonds, presented a very different appearance from that of present-day surgeons. He was my chief when I held the appointment of surgical ward clerk in the first three months of 1899, and had a large following of students in the wards as, in addition to his being a good teacher, he was also an examiner at the college. I recollect now a few of the things he taught me. For instance, that a dermoid on the forehead could be distinguished from a sebaceous cyst because the former, lying deep to the facial muscles, would not affect the disposition and presence of the furrows and lines on the forehead, but that the latter, being more superficial, would obliterate them. Though such a differential diagnosis is, I suppose, seldom encountered in practice, the next lesson that he taught me can be frequently applied. Thus, with a fractured metacarpal or phalanx, if the digit be pressed at its tip so as to transmit longtitudinal pressure, the pain will be experienced by the patient in the region of the fracture, if such be present. This sign has been of great value to me when treating an injured hand or foot. He also impressed upon me another useful practical point. " If," he said, " a blister forms in the region of a fracture, and if that blister is burst, the fracture becomes a compound one."

Davies-Colley always liked to do his own urgent surgery and I remember well an operation which he performed on a woman with a stangulated femoral hernia one Sunday night after a long journey from his country house in Sussex. He also performed very good operations for cleft palate and hare-lip, and insisted on three points being properly observed in these very difficult plastic operations. First, that there should be plenty of redundant tissue left at the end of the operation. For this reason he never liked relations or friends to see the patient soon after it had been performed, since the operation area looked so untidy. With time and asepsis, however, this redundant tissue disappeared and the wound healed well. Moreover, it allowed for suturing without tension and, consequently, much better results secured. Secondly, Davies-Colley always insisted that the nostril on the affected side should be made to look as natural as possible. The third point was the need for a central papilla, for it added so much to the grace of the newly-formed lip. He always carried a lateral incision so that the flap thus formed could be turned down and united to its fellow on the opposite side. By this means a papilla was constructed, imitating nature more exactly in the formation of the beautiful bow-like upper lip that one so often sees in normal people.

I have a quarrel with both Howes and Davies-Colley, however, on account of their treatment of some cases of urethral stricture. It is true that an anæsthetic was employed, but this did not prevent a fatal result in many cases. What these two surgeons did was to pass a small metal bougie, and, having found the stricture, passed the instrument through it. This small instrument was removed and a very large one was then introduced into the urethra and forcibly passed through the stricture. I have notes on one of Howse's patients who died at once, and I know of a case of Davies-Colley's who died within four days of the operation. Yet I feel sure that both of these surgeons must have had some success with this treatment, otherwise I am certain such honest men would never have continued to employ it. I learnt, however, from these cases, never to do more with an instrument under an anæsthetic that one would do without one. If an instrument cannot be passed, except with great difficulty and the exhibition of force, then an open operation should be performed, and the bladder should be opened suprapubically.

By way of illustrating another important principle I should like to record a case of dislocated radius that came under the care of Davies-Colley in the early part of 1899. The patient was a dear little boy who wore a white sailor suit and was aged about six years. The dislocation had occurred sometime before admission and could not be reduced, as the head of the radius slipped away from the corresponding surface on the humerus almost as soon as pressure was released. Davies-Colley very properly decided to perform an open operation. He succeeded in reducing the dislocation, but only with very great difficulty and after a great deal of handling of the parts concerned. The wound was sutured and dressed and, after this, an anterior angular splint was applied. Next morning it was noticed that the fingers were blue. There was some delay in the arrival of the house-surgeon and, when Davies-Colley arrived in the afternoon, he found that the pulse at the wrist had stopped and that amputation through the upper arm was indicated. This operation he performed, but the boy died very shortly afterwards. In such a case, by all means let an anterior angular splint be applied, but the person who is responsible for the after-treatment must see that the circulation is not disturbed by its presence and, if it be, that the splint must be removed at once.

I may now digress a little and introduce a great surgeon who watched Davies-Colley perform the first of the above-described operations. This was Sir Thomas Bryant, who was then consulting surgeon to Guy's and had recently occupied the presidential chair of the Royal College of Surgeons. He was a tall and distinguished-looking man with side-whiskers and a broad, open face, but he had very little back to his head and, for this reason, looked more distinguished with his tall hat on than when he took it off. I have always understood that he very much resented any use being made of his cases for research work, and for any research worker to use information gathered from this source, even with Bryant's permission, was as much as his future was worth. Bryant used to excise hip-joints for tuberculous disease, yet I believe that Guy's men were " ploughed " at the College final examinations if they suggested this method of treatment. The subsequent shortening was so very great. Studying the after-history of some of the cases I recollect that there was as much as nine inches shortening in one of them· I like to think that the paper I then wrote on this subject did much to discredit this particular operation.

Although it has nothing to do with Bryant or Davies-Colley, I cannot help mentioning another bad operation devised by a surgeon at Guy's. It bears the name of Cock, who was dead at the time when I came to the Hospital. It was performed for impassable stricture and was, in fact, a perineal section of the bladder behind the stricture, undertaken for acute retention. Sometimes, so one reads in the post-mortem reports, the bladder was never opened and what the operation did effect was the opening of the cellular tissue surrounding the prostate which, inevitably, led to sepsis spreading along the connective tissue planes to each kidney. The fatal results occurred sometimes with quite startling rapidity. In spite of the high mortality it entailed, Guy's surgeons constantly practised this manœuvre, for it was rather a dramatic operation and showmen, like Lucas, were particularly attracted to it.

This brings me at once to the surgeon next in order on the full staff at Guy's, namely, Clement Lucas. He was, I think, a Jew, and was not at all popular, reminding one kindly physician of the surgeon who is depicted in Tennyson's poem, " In a Children's Hospital." As an examiner in anatomy for the London and Conjoint examinations he was a bully and " put off " many candidates by his cynical manner. Nevertheless he had been a brilliant surgeon. Unfortunately, he had contracted, rather late in life, typhoid fever, followed by what was called in those days a relapse. After these diseases he was never the man he had been before they occurred and, at the beginning of this century, took little interest in his hospital patients. He was the first surgeon to cut down upon the kidney deliberately, which was just the kind of operation he would do—dramatically and rapidly. I have been told that this particular operation was performed against the wishes of the Governors of the Hospital, but it was most successful. It was a nephrotomy for renal calculus and the patient was alive and well many, many years afterwards. Lucas approached by the lumbar route, using an incision first designed by the father of my old friend, Dr. R. Larkin, now in practice in Trinity Square where his father was before him.* Dr. Larkin, senior, went to live at Grove Park, which at the beginning of this century was rather undeveloped as a residential district and, in January, 1902, I was asked to do a locum there. Thus I met him. He showed me an interesting specimen and told me about his researches. The specimen was the uterus of Harriet Wainwright, who had been murdered in some district of London—I think Whitechapel or nearby. The corpse had been carried to the Borough by the man who had actually committed the murder and buried in a cellar. His brother, by helping him dispose of the body, became an accessory after the fact and was, therefore, liable to be hanged as well. The men were arrested after the body had been found and important evidence was desired as to the possible pregnancy of the murdered woman. I believe that the uterus was, as commonly happens in this organ, in a good state of preservation, even some time after death had taken place. Dr. Larkin examined it and considered it to have been pregnant. At the trial of the prisoners Dr. Larkin gave his reasons for thinking this, and his evidence was accepted against that of a forensic expert, Dr. A. S. Taylor. The fact of previous pregnancy weighed heavily against the prisoners but, so it was reported to me, the accessory after the fact was hanged and the other, who had actually done the deed, was sent to prison. Dr. Larkin also told me that he designed the lumbar operation for kidney operations. My recollection is that he operated upon dogs. The lumbar incision is really a most ingenious one, for it lies upon the surface of a globe. The kidney may then be rotated upon its pedicle in such a way that it can easily be brought out through the wound, with a minimum of tension upon the vessels. Honour should be given to Larkin for his idea and for working out of the operation.

As already mentioned, Lucas took little interest in his cases after he had been stricken with illness himself and, as a consequence, his house-surgeoncy and dresserships were eagerly sought. He allowed many operations of a major nature to be performed by his assistants. One house-surgeon incised the bladder in an operation for inguinal hernia, without recognising, in the least, that he had done so. It is, of course, quite a simple thing to do, but this patient died of peritonitis. When the bladder is found in connection with a hernia it is very commonly in the form of a diverticulum of the size of an ordinary lead pencil, which is encountered lying behind, but not in, the hernial sac. It may thus be mistaken for a lymphatic gland or something else ; indeed, anything but what it is. This statement reminds me of a tale which Mr. Graham Simpson used to relate. Mr. Simpson became house-surgeon to Mr. Lucas and later surgical registrar at Guy's ; then he went to Sheffield where he became professor of surgery, and later a member of the Council of the Royal College of Surgeons. Here is the story. Simpson was operating on a case of strangulated hernia in a patient under the supervision of Lane. Something appeared on the back of the sac, but Simpson had not the slightest idea as to what it was. Lane bent forward, and in his quiet way, said, " Yes, Mr. Simpson, you are quite right, that is the urinary bladder." " He that hath ears to hear, let him hear," are words that applied to many of Lane's apparently most casual remarks.

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* *A letter from Dr. R. Larkin on this subject appears in our correspondence column.*

[*To be continued.*]

GUY'S HOSPITAL CHAPEL HARVEST THANKSGIVING

Harvest Thanksgiving will be celebrated at Guy's Hospital on **Sunday, October 7th.**

Services in the Chapel will be as follows :—

7.00 a.m. Holy Communion.

10.45 a.m. Morning Service. Preacher : The Revd. D. A. Rhymes, B.A., Priest-Vicar, Southwark Cathedral.

The Chaplain would be most grateful for gifts in kind, of fruit, vegetables or flowers, which should be sent to the Chapel not later than 11.00 a.m. on Saturday, October 6th.

ST. LUKE'S DAY, THURSDAY, OCTOBER 18TH

As is now traditional, St. Luke's Day will be celebrated by a special service in Southwark Cathedral for members of the medical, dental and nursing professions, students and all engaged in the Health Service. It is fitting that on the festival of the Apostle who was the " beloved physician " such a service of dedication and praise should be held. It will be attended by representatives of many hospitals in the S.E. Metropolitan Region. The Provost of Southwark hopes that as many people from Guy's as possible will accept this invitation to be present.

The service begins at 1.15 p.m. and finishes at about 1.50 p.m. The preacher this year will be The Right Revd., The Lord Bishop of Ely.

APPOINTMENTS BUREAU

The following is a summary of the appointments obtained through the Appointments Bureau for the period May, 1950–51 :—

MEDICAL

43 House Surgeons.
17 House Physicians.
10 Senior Appointments.
62 Hospital Locums.
11 Assistants with view to Partnership.
2 Assistants.
75 General Practice Locums.

DENTAL

11 Assistants with view.
2 Assistants.
1 Senior Hospital Appointment.
1 Practice.
5 House Surgeons.
12 General Practice Locums.

Correspondence

Passim—Neurosurgical Unit.

SIR,—I was very interested in the contents of Passim which appeared in the *Gazette* of the 28th of July, 1951. It has always appeared that Guy's was unduly slow in instituting a department of neurosurgery as compared with other teaching hospitals in Great Britain, Canada, and the United States. The latter two countries consider a university hospital incompletely equipped for both undergraduate and postgraduate training without a neurosurgical unit. The reason for this inertia at Guy's I do not know, but this question and similar questions were widely discussed during my period at Guy's and it was said that a number of the more senior surgeons did not consider that there was a necessity for such a specialised department and that they were capable of performing all the neurosurgery which might arise. How true this was I do not know ; but of course such an attitude would be inexcusable and certainly slow down all progress. Fortunately, however, neurosurgery has firmly taken its rightful place as an integral section in the field of medicine by the apparently more enlightened institutions.

Apart from the obvious great importance of a neurosurgical unit in the treatment of certain emergency accident cases there are many well-established diseases which are admitted to the wards of general hospitals and warrant highly specialised neurosurgical treatment. If a large and respected teaching hospital has to evacuate these patients to another institution for treatment, then it is not only losing a previously well-earned good reputation, but it is sloughing off a responsibility and independence which in these days should be jealously guarded.

I can remember the embarrassing situation which occurred at Guy's during V.1 and V.2 raids when a neurosurgeon from another London teaching hospital was called for advice about a certain bomb casualty—Guy's not having their own neurosurgeon. As far as we students were concerned, the only saving grace for our cherished and much loved Guy's was that we were informed that our visitor was an old Guy's man.

I agree wholeheartedly with the editor of the *Gazette* when he states that as far as students and house officers are concerned there will be an incomplete follow-up of certain patients. This will be accompanied by a loss of interest which naturally occurs when the patient is going to be sent away to another hospital for treatment. Also, when outside doctors and institutions realise that Guy's is not capable of treating this particular group of patients but has to evacuate them to another hospital, then those referrals will automatically be sent to Denmark Hill or any other institution that has these specialised facilities. I also know from my own experience and that of my contemporaries that trekking across London for instruction at other institutions is not only a great nuisance and inconvenience but a real waste of time taken in travelling. If this decentralisation attitude continues, who knows but we may see Mr. Brock's internationally famous cardiac surgical unit being evacuated to the London Heart Hospital.

The Maudsley Hospital is not Guy's Hospital, and it is inconceivable that there could ever be a truly Guy's neurosurgical unit in both spirit and training anywhere else but at Guy's. Surely, we are in a perfect position with rebuilding so close at hand for planning a new neurosurgical unit (and any other new specialist units that may be necessary).

I sincerely hope that the controlling influences at Guy's will reconsider their ill-advised decision to evacuate the recently formed neurosurgical unit to Denmark Hill. This question is of great importance, and I cannot help but feel that such retrograde steps will help to lose that wonderful reputation which Guy's holds not only in Europe but in Canada and the United States. I hope this letter will stimulate others to express their views on this subject.

Yours, etc.,

ROBERT WALTON.

Pupils' Physical Society

SIR,—May we trespass on your space to draw attention to the Physical Society in its forthcoming season. It is proposed to hold the Annual General Meeting on Tuesday, 2nd October at 4.30 p.m. in the Anatomy Theatre, when the programme will be discussed.

All students are reminded that the Society is a clinical one, despite its name, and is primarily intended to afford students an opportunity of discussing matters of clinical interest, and of presenting cases.

The Society is the oldest of its kind in the country, being now 180 years old, and had the support, in the past, of many distinguished Guy's men.

All those interested are cordially invited to attend the meetings and it is hoped that this season will see a further revival of interest in this Society and increasing support for its activities.

Yours, etc.,

R. E. IRVINE,
P. G. LARGE,
Hon. Secretaries.

Guy's 1890–1895—Some Reminiscences

SIR,—Mr. S. Copley's reminiscences were very interesting to me for I knew all the surgeons he was referring to and perhaps I knew Sir Henry Howse a good while before he did, for when my father went up to Edinburgh to take the L.R.C.P. after he had qualified as M.R.C.S. Eng. in 1870 he asked Sir Henry Howse to come in at night at the address below as I had an attack of Croup and was about 4 years old. Now, as regards Mr. Clement Lucas and Nephrolithotomy—it was the fact that my father read his paper on Nephrolithotomy at the Physical Society in 1868 whilst he was a student that prompted Mr. Lucas, who qualified that year, and Sir Henry Morris who qualified in 1867, to eventually carry out the operative procedures as recorded by my father and read before a large gathering at Guy's. Now, the causes of the experiments carried out on rabbits (mammals) to prove its feasibility were twofold. A man was brought in run over with a ruptured kidney and he was dying rapidly from hæmorrhage. My father asked, " Why cannot we remove the kidney ? " and the answer was, a man could not live with one kidney ! Further up in Martha Ward there was a woman with severe Renal Colic who came from the same district as my father's family and his birthplace, and he associated the two cases together as requiring surgical procedure and hence the experiments on twelve rabbits were started at once—some having Nephrectomy and some a planned Nephrolithotomy—being kept on their backs for drainage, all under chloroform, and of course by the lumbar incision. I have a copy of his paper in my possession—the original was placed in the College of Surgeons placed between glass slides for the better keeping. It seems that this was almost as great an advance in the surgical side at Guy's as had been that of the medical side in Bright's and Addison's days. Curiously, in Vol. II, p. 728, published in 1857 by Sir Thomas Watson—The Practice of Physic—it states, " It is very remarkable that two physicians living at the same time and in the same town and attached to the same Hospital should have brought to light two most serious forms of disease utterly unknown before and in parts of the body *so contiguous* "—Sir Thomas would have been interested to know that in these contiguous parts at the same Hospital and the same town and place in 1860 was found an equally important procedure.

Yours, etc.,

R. LARKIN.

Trinity Church Square,
S.E.1.

Guy's 1890–1895—Some Reminiscences

SIR,—Many will have read Mr. Stanley Copley's Reminiscences of 1892–95 with great interest. I should, however, like to correct a small matter of history about Sir Henry Howse ; Mr. Copley states that when he was Howse's H.S. in 1895 " the carbolic spray was gone." In 1902 (Jan.–March) I was one of Howse's ward clerks and we used the spray as a routine at all operations. In his " Twentieth Century Physician," Sir Arthur Hurst mentions that Sir Henry Howse used the spray at a private operation two years after his retirement from the staff. Mr. Copley is also somewhat pessimistic about Howse's expectation of life as he did not die till September 1914.

Yours, etc.,

WM. MOLLISON.

SIR,—I thoroughly enjoyed Dr. Copley's Reminiscences of Guy's 1890–95 as I came up in 1893 and was H.S. to Mr. Howse from October 1899 to March 1900, after also dressing to " Pom " and Mr. Lucas. I found all Dr. Copley's details delightful and so true to my own recollection except on one point. Mr. Howse still used the carbolic spray in 1900 and still protected the backs of his hands with vaseline. I was so upset by this that I had small pots of vaseline heated in a waterbath and gave him a fresh pot for each operation. He looked hard at the fresh level surface each time but never said anything. I don't suppose it did any good. Mr. Howse had then given up operating in a coat and used a long white macintosh the same as the dressers had under their wet boiled overalls. We could not prevail on him to use an overall but the dressers spent several evenings a week boiling a fresh lot of overalls for each operation and soaking them in pails filled with lysol lotion for use next day. I note Dr. Copley was H.S. as long ago as 1895 and is still only 75. May I offer him my congratulations.

Yours, etc.,

F. DOUGLAS TURNER.

ACADEMIC

September		
		Exhibition. Surgical Department. " Goitre."
24th	1.00.	Mr. Morgan. Clinical Lecture. " Toxic Amblyopia and Methyl Alcohol Poisoning."
27th	1.00.	Sir Heneage Ogilvie. Clinical Lecture. " Surgery."
28th	1.00.	Dr. Hampson. Clinical Lecture.
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
October		
		Exhibition. Surgical Department. " Bone Tumours."
1st	5.00.	Department of Surgery. Film. " Fistula in Ano and Anal Fissure." Clinical Theatre.
4th	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
5th	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
8th	1.00.	Mr. Gibberd. Clinical Lecture.
13th	10.00.	Surgical Departmental Round. Mr. Hermon Taylor.

SPORT

September	
29th	Rugby 1st XV *v.* Old Whitgiftians. (H.O.P.)
	Rugby "A" XV *v.* Rochester. (Rochester.)
October	
6th	Rugby 1st XV *v* United Services (Portsmouth). (Portsmouth.)
	Rugby "A" XV *v.* United Services "A" (Portsmouth). (Portsmouth.)

Sport

CRICKET

Inter-Hospitals Cup Competition, 1951

WON BY GUY'S

Semi-Final *v.* St. Mary's at Teddington

Result—Won by 116 runs

After having played St. Mary's three times last year without obtaining a result, Guy's were determined that this year one game would be sufficient.

Allan won the toss and Guy's, though scoring quite quickly, found themselves in a little trouble. Of the earlier batsmen, only Tunnadine scored freely against the spin bowling of Speight, and when he was caught the score was 84 for 6. Prentice, Bissoon-Dath and Gray then hit the ball hard and often to carry the total to 172. Speight had the good figures of 6 for 56, and Mary's were quite jubilant.

The Mary's batsmen scored steadily against Lyon and Gray, and after 20 minutes the score was 30 for 2. Then Lyon bowled three consecutive maiden overs and, at the other end, Gray bowled four maidens before getting Thompson, who had scored 202 not out a few days previously, caught in the leg trap. The rest of the Mary's batting wilted against the two team bowlers. Lyon (6 for 22) bowled magnificently, extracting unexpected life out of the plumb wicket. Gray also bowled superbly and took 4 for 28. The fielding was good and Howells took three fine catches behind the wicket.

SCORES

Guy's

D. M. E. Allan, c. Ellis, b. Baxendall ..	14
N. R. Cooke, c. Robertson, b. Baxendall	13
D. M. Lipington, b. Thompson	9
P. L. Pickett, c. Somper, b. Speight ..	15
D. Tunnadine, c. Reddy, b. Speight ..	22
W. J. Howells, c. Baxendall, b. Speight ..	8
H. Prentice, b. Ellis	20
H. Bissoon-Dath, b. Speight	30
K. Gray, not out	28
M. A. C. Lyon, c. Simmons, b. Speight	5
T. Smith, c. Thompson, b. Speight ..	0
Extras	8
Total	172

St. Mary's

A. E. Thompson, c. Pickett, b. Gray ..	19
J. I. S. Robertson, c. Howells, b. Lyon ..	5
J. D. Somper, c. Gray, b. Lyon	4
M. Lawrence, b. Gray	0
M. Liscombe, c. Howells, b. Lyon ..	0
J. Willis, c. Tunnadine, b. Gray	11
M. Speight, c. Howells, b. Lyon.. ..	4
S. C. Simmons, b. Lyon	5
R. Reddy, not out	2
A. R. Ellis, b. Lyon	0
J. D. C. Baxendall, b. Gray	0
Extras	6
Total	56

Bowling : Lyon 13 overs, 4 maidens, 22 runs, 6 wickets ; Gray 12·2 overs, 6 maidens, 28 runs, 4 wickets.

Final *v.* St. Thomas's at Teddington

Result—Won by 4 wickets

This game was cricket at its best—thrilling throughout the whole three days, with the fortunes of the two teams varying from hour to hour.

Thomas's won the all-important toss, and naturally chose to bat. After losing an early wicket, runs came steadily and easily, and at lunch the score was 154 for 2. In the afternoon Webb, the old Oxford Blue, and the West Indian Ross, batted extremely well and the fourth wicket did not fall until 247 were on the board. Guy's were then able to take the new ball, and Lyon and Gray steadily took the remaining wickets. Thomas's were all out at 5.0 p.m. for 311—a very high total. Guy's began their first innings by losing two quick wickets, and at the close of play were 89 for 2—Blake not out 59 and batting confidently.

The second day's play opened tragically for Guy's—*within 25 minutes* Blake and Allan were both out to similar balls with only 13 runs added to the score. Pickett and Tunnadine carried the score to 156 before the latter was caught in the covers—again a second wicket fell quickly after this and Guy's were 164 for 6—and 311 seemed a long way off. Pickett and Howells took the total to 202 before Pickett was bowled after playing a fine invaluable innings of 79. At lunch the score was 205 for 7. The afternoon's play was most exciting and was undoubtedly the main factor in deciding the destination of the Cup. In 155 minutes Howells and Bissoon-Dath added 125 runs, of which Bissoon-Dath scored 124 including 20 fours. After an early escape Bissoon-Dath hit the loose balls very hard and batted superbly. Howells magnificently kept the other end as closed as the proverbial barn door. After Bissoon-Dath's departure at 327 when we had obtained a first innings lead, Howells scored quickly until he was last man out. Thanks mainly to Bissoon-Dath we had scored 355 and obtained a lead of 44 very valuable runs.

Tea was then taken and Guy's took the field determined to press home their advantage. And right well did they succeed ! Lyon took two quick wickets with the score only 11. Ross and Webb again batted confidently until Smith's slower ball enticed Ross to give a return catch. 80 for 3—and 20 runs later Webb lifted his back foot for a fraction of a second and was brilliantly stumped by Blake. Blake then took an amazing catch wide and low down on the leg side to dismiss Williamson. Lyon then quickly took another wicket, and the day ended with Thomas's 112 for 6. A thrilling fluctuating day's play, and the Cup was almost within Guy's grasp.

The following morning, the Thomas's seventh wicket pair batted confidently against the bowling of Lyon, Gray and Bissoon-Dath. 70 runs were added before, in a spell of 11 balls, Bissoon-Dath took 4 wickets for 6 runs to give him an analysis for the innings of 4 for 18. Thomas's were all out for 185 and Guy's required 142 to win. As Blake had left to play for Hampshire against Lancashire, Howells took over the wicket-keeper's duties and stumped two and caught one of the last few wickets that fell.

Cooke and Howells opened the innings for Guy's and in the 55 minutes before lunch scored 43 runs without being separated. After playing a stubborn opportune innings Howells was caught with the score 54. Cooke and Lipington carried the score to 79, and then three wickets fell quickly for the addition of 5 runs. Cooke was unfortunately run out after batting confidently and scoring 54 valuable runs. The wicket was now taking a lot of spin and Tunnadine and Bissoon-Dath were dismissed quite cheaply to make the score 113 for 6. With only 10 men, Guy's required 29 to win with three wickets left. Allan and Gray slowly brought the total nearer with ones and twos. Two loose balls were dispatched to the boundary to bring the totals level and a single into the covers from Gray won the match to the relief of the whole team and the 8 or 9 Guy's supporters (including two Mary's nurses !) who evidently provided all the following the Hospital could produce.

So the Cup returned to Guy's after five years' absence—to be dismally condemned to some underground vault and not seen by anyone all the coming year.

SCORES

St. Thomas's

1st innings

H. F. Price, b. Lyon	4
D. R. W. Harley, c. Allan, b. Bissoon-Dath	44
B. H. Ross b. Allan	66
H. E Webb, c Smith, b. Pickett	108
W. O. Williamson, c. Blake, b. Lyon	45
M. C. T. Morrison, b. Lyon	0
A. P. Vittermaster, not out	26
M. W. L. Davis, b. Lyon	10
W. M. Save, st. Blake, b. Gray	1
P. A. Mounfield, b. Gray	0
E. W. Broadhurst, run out	3
Extras	4
Total	311

Bowling : M. A. C. Lyon, 20-2-70-4 ; K. W. Gray, 20-4-61-2 ; N. R. Cooke, 15-2-61-0 ; T. Smith, 3-0-10-0 ; H. Bissoon-Dath, 7-0-28-1 ; P. L. Pickett, 7-0-34-1 ; D. M. E. Allan, 13-2-42-1.

2nd innings

H. F. Price, b. Lyon	1
D. R. W. Hartley, b. Lyon	3
B. H. Ross, c. & b. Smith	46
H. E. Webb, st. Blake, b. Cooke	46
W. O. Williamson, c. Blake, b. Lyon	5
M. C. T. Morrison, c. & b. Bissoon-Dath	56
A. R. Vittermaster, c. Tunnadine, b. Lyon	5
M. W. L. Davis, st. Howells, b. B.-Dath	14
W. M. Save, c. Howells, b. Bissoon-Dath	0
P. A. Mounfield, not out	1
E. W. Broadhurst, st. Howells, b. B.-Dath	4
Extras	4
Total	185

Bowling : M. A. C. Lyon, 24-2-73-4 ; K. W. Gray, 11-4-39-0 ; N. R. Cooke, 4-1-7-1 ; T. Smith, 5-0-20-1 ; H. Bissoon-Dath, 6·5-1-18-4 ; D. M. E. Allan, 3-0-16-0.

Guy's

1st innings

D. E. Blake, l.b.w., b. Williamson	40
N. R. Cooke, c. Save, b. Williamson	1
D. M. Lipington, b. Ross	8
P. L. Pickett, b. Mounfield	79
D. M. E. Allan, l.b.w., b. Williamson	5
D. Tunnadine, c. Ross, b. Webb	31
K. Gray, l.b.w., b. Webb	6
W. J. Howells, c. Hartley, b. Morrison	38
H. Bissoon-Dath, b. Morrison	124
M. A. C. Lyon, c. Hartley, b. Marrison	5
T. Smith, not out	1
Extras	18
Total	355

Bowling : B. H. Ross, 32-4-105-1 ; W. A. Williamson, 27-4-74-3 ; E. W. Broadhurst, 3-0-9-0 ; H. F. Price, 3-0-18-0 ; P. A. Mounfield, 18-7-57-1 ; H. E. Webb, 11-1-52-2 ; M. C. T. Morrison, 6·2-1-22-3.

2nd innings

D. E. Blake, did not bat	
N. R. Cooke, run out	54
D. M. Lipington, c. Davis, b. Kittermaster	12
P. L. Pickett, c. Save, b. Morrison	0
D. M. E. Allan, not out	24
D. Tunnadine, c. Save, b. Morrison	8
K. Gray, not out	13
W. J. Howells, c. Save, b. Morrison	11
H. Bissoon-Dath, l.b.w., b. Morrison	13
M. A. C. Lyon, did not bat	
T. Smith, did not bat	
Extras	7
Total	142

for 6 wickets.

Bowling : B. H. Ross, 3-0-17-0 ; W. A. Williamson, 5-4-3-0 ; H. F. Price, 5-1-12-0 ; P. A. Mounfield, 4-1-13-0 ; H. E. Webb, 3-0-10-0 ; M. C. T. Morrison, 24-5-57-4 ; A. R. Kittermaster, 17·5-8-27-1.

Hospital Information, etc.

PASS LIST

CONJOINT BOARD

L.R.C.P., M.R.C.S.

Final Examination

July, 1951

Pathology

A. C. D. Abdool-Raman
R. K. Allday
T. K. H. Boenheim
S. K. Bosher
F. D'U. Burgess
J. W. Comper
J. Dennis
H. P. Duke
J. Eastwood
D. J. Green
B. G. Jackson
G. A. Kerr
*E. M. Newton
G. B. Skinner
K.G.Somers-Dehaney
E. M. Sycamore
H. R. Whitaker
L. Yoke-Htyan

Medicine

A.C.D.Abdool-Raman
T. K. H. Boenheim
*H. Gold
T G R Jones
*N. M. Midgley
*E. M. Newton
*R. A. J. Webb

Surgery

R K Allday
S K Bosher
W A J Bufton
*R J O. Catlin
J. W. Comper
G. B. Davison
J. R. Evans
A. Fairley
*N. Gee
P. S. Greaves
*E. T. Johns
*G. M. Karpusheff
I. H. Kerr
P. F. P. Lansdown
*M M Levene
*M M Lubel
*I H Maine
G. A. Marin
*W. H. McKendrick
E. Morrison
*E. M. Newton
D. W. L. Phillips
*J. R. Robinson
A. Shotts
*E. P. W. Tatford
W. W. Thompson
R. S. Wells

Midwifery

R. K. Allday
F. J. A. Bateman
E. W. G. Birch
L. H. Brearley
R. W. Brotherwood
C. C. Bull
C. V. Bullen
F. D'U. Burgess
E. E. Clapham
G. B. Davison
H. P. Duke
J. Eastwood
P. S. Elias
F C Emberton
A Fairley
E Fincham
A. G. E. Fung-a-Fat
N. B. Gillison
D. C. Harris
E. G. Haydon
J. C. M. Heylen
P. E. Kapff
G. A. Kerr
I. H. Kerr
A. V. Large
*I. H. Maine
B. L. Mallett
G. A. Marin
E. Morrison
E. A. Murray
C H Opie
H S Reeve
D S Robinson
G. B. Skinner
J. D. Waye
D. C. Wilkins

* Have completed the examination

The following have completed the examination for the Diploma L.R.C.P., M.R.C.S.

D. G. Bluett
A. R. Davis

UNIVERSITY OF LONDON

Special Second Examination for Medical Degrees

July, 1951

M. R. Alderson
V. C. J. Barker
H. R. Bissoon-Dath
Elizabeth O. Bradley
J. A. A. Bullard
J. C. Burt
B. B. Collins
D. Constad
M. C. Gie
L. Hall
K. A. Hillard
D. P. Honey
K. S. Jap
J. V. V. Lewis
W. S. Lund
H. C. Meredith
D. B. A. Ofomata
E. G. Reynard
K. P. Walker
D. J. Waller

The following candidate has qualified for admission to Ph.D. :—

Margery G. Ord

Special First Examination for Medical Degrees

June, 1951

E. L. R. Andrews
B. W. G. McG. Beeching
Mary E. Braithwaite
D. R. Burcombe
J. E. A. Chiappe
N. R. Cooke
N. L. Crabtree
C. D. W. Davies
M. R. Davison
J. O. O. Fajemisin
P. A. French
W. H. Gibson
I. D. Green
A. R. Grice
R. S. Henderson
L. M. Hillman
E. D. Keen
R. F. King
K. Kitiyakara
C. J. Lambert
T. M. C. Lindsay
D. A. Logan
L. B. Lux
M. B. R. Mackenzie
J. A. Morgan
K. J. Morison
Moira M. Murphy O'Connor
J. W. Osborn
J. Payan
R. A. Peebles
D. A. Rees
R. W. Salmon
H. R. Singer
E. E. Smith
R. D. C. Southcott
E. J. Taylor
K. T. Tighe
D. Wilson
P. J. E. Wilson
Gillian Wood
C. D. Wooding
M. J. Young

The following Higher School Candidates have qualified for exemption from the First Medical Examination :—

Hilary Allin
G. S. Duncan
Florence P. Forsythe
R. A. Harlow
J. B. Illingworth
P. Jones
M. A. Lyne
B. C. Mallaband
K. T. Nicolson
R. E. Owen
D. Parrott
R. F. Ridley
F. N. Rigby
M. B. Rothschild
M. C. Shannon
R. P. Snaith
R. D. G. Stevens

Second Examination in Dental Surgery—Part I

July, 1951

T. P. Bass
C. P. Briggs
I. M. Briggs
I. Caldwell
D. A. Coppock
P. L. Cumming
P. Degens
P. H. Goddard
M. S. E. Gould
H. C. F. Hudson
J. N. James
D. A. Lambert
J. D. Lane
J. S. Lee
P. A. Long
M. J. O'Brien
P. W. Pollock
B. H. Pritchard
M. J. N. Segerdal
D. J. Veale
P. J. Wege
P. E. Williams

Second Examination in Dental Surgery—Part II

July, 1951

L. J. Cheeseman
M. W. Cooksey
Helen C. Cummins
D. P. Fawkner
D. S. Noble
D. C. A. Picton
D. J. Wicker

PAPERS BY GUY'S MEN

Besterman, E. M. M. The Use of Phenylephrine to Aid Auscultation of Early Rheumatic Diastolic Murmurs. *Brit. med. J.*, 1951, ii, 205.

Edwards, C. H., and another. A Review of the Symptoms and Signs of Acoustic Neurofibromata. *Brain*, 1951, **74**, 144.

Fourman, Paul, and others. The Excretion of Small Doses of Folic Acid. *Brit. med. J.*, 1951, ii, 202.

Graham, A. J. P. Toxic Effects in Animals and Man after Tetraethylammonium Bromide. *Brit med J.*, 1950, ii, 321.

Graham, A. J. P. The Effect of Tetraethylammonium Bromide on the Return of Blood Pressure in the Femoral Artery Distal to an Acute Occlusion. *Brit. J. Surg.*, 1951, **38**, 519.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Registrar** in the **Department of Preventive Dentistry** with attendance on 6 sessions per week to commence duties on **1st November, 1951.**

Salary will be at the rate of £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **12th October, 1951.**

Applications are invited for the post of **Chief Assistant** (Senior Registrar) to the **Department of Psychological Medicine** for attendance on five sessions a week, commencing as soon as possible after **15th October, 1951.** Duties will include in-patient and outpatient work. The appointment will be in accordance with the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service. Forms of application are obtainable from the Superintendent, to whom applications whould be sent not later than **6th October, 1951.**

CHANGES OF ADDRESS

A. A. Bailey, Esq., L.D.S., R.C.S., 44, Kingston Road, New Malden, Surrey. Tel. : Malden 0292.

F/O. W. F. Dobson, Officers' Mess, Royal Air Force Flying College, Manby, Lincs.

W. H. Trethowan, M.B., M.R.C.P., D.P.M., "The Croft," 17, Bramhall Park Road, Bramhall, Cheshire.

BIRTHS

DICKSON.—On September 1st, 1951, to Patricia (née Palin), wife of James R. Dickson, M.B., B.S.—a son (Patrick John Palin), a brother for Christopher.

FINKEL.—On September 1st, 1951, at the Royal Northern Hospital, to Jeanette, wife of Wallace Finkel, L.D.S.—a son, Irving Leonard.

REINHOLD.—On August 19th, 1951, at St. Mary's Hospital, Paddington, to Jeune (née Dalton), wife of John Reinhold, M.R.C.P.—a third daughter, Kirsten Ann.

MARRIAGE

DAVIES—PLESTED.—On July 26th, 1951, at Brockley Congregational Church, William Gwyn Davies, B.A., M.B., B.Ch., to Muriel Elizabeth Plested, S.R.N.

DEATHS

DUKES.—On April 26th, 1951, Edmund Sprague Dukes, M.B., B.S., of Mangonui, Auckland, New Zealand.

GRELLET.—On August 22nd, 1951, William Pennington Grellet, M.R.C.S., L.R.C.P., of Orford Lodge, Hitchin, Herts., aged 76 years.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1649 *6th October* 1951 *One Shilling*

PASSIM

MINDFUL that in the early part of October a large number of students enter Guy's for the first time, editors have made it a habit to salve their social consciences and grasp at literary expediency by uttering a welcome to the newcomers in the corresponding issue of the *Gazette*. Looking back, we realise how we have fallen so often between the Scylla of the illustrated brochure and the Charybdis of moral exhortation. Can we, then, be more frank on this occasion ?

In the first place, there is no point at all in telling freshmen what a fine place they will find Guy's to be. That, besides begging the question, is far better dealt with in the Medical School Calender. Indeed, those who have finally reached the stage of enrolment must consider themselves either extremely lucky or, in a few instances, extraordinarily brilliant. For, of the multitudes who seek to enter, very few are ultimately chosen. And since that select body is now an intrinsic part of Guy's, its members are concerned, not so much with what Guy's might have been, but more so with what they are going to make it.

In the second place, educationally, Guy's is at present far from perfect. Neither to the Governors of the Medical School nor to its academic staff can the blame be entirely, or even primarily, attached. University neglect and inter-hospital glory are far more likely at fault. The examining bodies are few, whilst the various hospitals from which candidates emerge are contrastingly numerous. Each one of them aspires to the pre-eminent position among the passes and distinctions. This competition, we submit, is anything but healthy ; in truth, it is positively malignant. Instead of raising students in an atmosphere of enlightened medical practice, teachers are pre-occupied with examination successes. Lectures thus vie with tutorials and revision classes alternate with answers to old question papers. Is it surprising, therefore, that clinics are less well attended, that ward rounds are neglected and that the clerking of patients is regarded as an unnecessary burden ?

If the student should desire more of life and of culture, the opportunities are there, so it is said, for anyone to grasp. Yet is it enough, to flirt with painting, to toy amorously with music, or to devote oneself to sport, for example ? Guy's, for long, has been accepted as a seat of enterprise and as a centre of individual thought. Perhaps here then, a new stand can be made, even before it is too late. Granted, if we gave up lecturing as an offering of potted facts, discontinued cramming classes and let students discover more for themselves, the immediate consequence would be reflected in the Conjoint and University examination pass lists. So long, however, as faith was kept—faith not only to ourselves but to future generations of doctors and of patients, no one should have cause for remorse. Our academic duty at London Bridge may well fall short of a classical university education. It involves an obligation though, above the mere organising of technical classes. If we may quote Walshe, in his Linacre lecture of 1950, there is in medicine " a humanism that strives for intellectual excellence ; on the speculative side for the perfection of the lower reason which is ordered knowledge, *scientia*, and for that of the higher reason which is wisdom, *sapienta*, by which we are enabled to place knowledge in the whole framework of life ; while on the moral side it includes practical wisdom, that is, prudence."

Such, in itself, is virtually a creed, one that in medicine should never be forgotten.

The Value of Fiction in Medical Education

By HUGH BARBER, M.D., F.R.C.P.
Consulting Physician, Derbyshire Royal Infirmary

" The author who has enlarged the knowledge of human nature."
—Samuel Johnson's opinion of Richardson, the novelist.

IT is recorded that Thomas Sydenham (1624–1689), when asked what a medical man should read, responded, " Don Quixote, which is a very good book, I read it still." One would suppose that he wished to teach the lesson that authoritative works, such as those of Hipprocates, Galen and Avicenna, were a poor substitute for actual study of disease at the bedside.

The seventeenth century was a time when freedom of thought was in the air. The Pilgrim Fathers had crossed the Atlantic to gain freedom in religion ; Sydenham, himself, had been one of Cromwell's soldiers ; George Fox, with his Society of Friends, was preaching up and down the country, in and out of gaol. It was only exceptional people who thought for themselves, but there was a general movement towards freedom of belief.

In the sixteenth century John Geynes had been cited before the Royal College of Physicians for saying that he did not believe in the infallibility of Galen—and he apologised and recanted. In spite of the fact that Vesalius (1514–1564) had studied anatomy by dissecting the human cadaver for himself and that William Harvey in 1628 published his account of the circulation of the blood, the grip of medical authority was firm. Indeed there was an Elizabethan statute, not repealed in Sydenham's days, which limited one Regius Professor of Medicine that he should lecture only on the works of Hippocrates and Galen.

Sydenham's studies of the natural history of disease were enough to justify his being called the English Hippocrates. He wrote ; " It is my nature to think, where others read." His remark about *Don Quixote* is in keeping with the spirit of his teaching, but it is hardly probable that he expected such a saying to live after him. This must apply, however, to many other traditional remarks ; such as Pope Gregory's " Non Angli sed Angeli," or Charles the Second's " I am afraid, gentlemen, I am an unconsionable time adying." Mr. Punch recently touched on this question of what words or incidents will live, with a picture of King Alfred looking chagrined as an irate female shakes her fist at him, while His Majesty mutters, " All this fuss about a few cakes that will be forgotten in a day or two."

Sometimes words are spoken deliberately by a teacher to drive home a lesson, although he would not have so written his idea. And the words survive because they are quoted. I hope the Guy's tradition still retains the picture which my generation knew, of Sir George Savage opening his course of lectures on disorders of the mind with the words ; " Gentlemen, there is no such thing as insanity."

It is not without interest to speculate as to whether Sydenham found more virtue in *The Adventures of Don Quixote* than merely the negative one that it was not a medical treatise. Fiction has the advantage that it does not go out of date. It may describe the manners of a period or it may illustrate the fact that human nature does not change. The fiction which lives is that which is true in these connections. Now Don Quixote was mad ; the author says so. It came about because he read books of knight errantry and had " the belief that all the fanciful stuff he had read was true." Cervantes in his prologue states that his aim is to destroy " the authority and influence which books of chivalry have in the world." His book has lived because the characters are true to human nature. But the rubbish which the author says Don Quixote had read is all forgotten.

The safest guide that any book is capable of teaching human nature is that it has survived to another generation. The story may be fantastically impossible, like *The Wrong Box*, by Stevenson and Lloyd Osbourne. But the instruction is there with such characters as Michael Finsbury, a delightful companion for some adventure and his Uncle Joseph who is the perfect bore ; a mine of information of no interest to anyone except himself. When he obtained a lift in a carrier's cart he said to the driver ; " Do you know how often the word whip occurs in the Old Testament ? One hundred and (if I remember exactly) forty-seven times."

It is a good thing to take a course in psychology if one can digest it. But all of us who practise clinical medicine go to a school of human nature. We learn to understand our fellows and to know how they will react to life in general. We see that while we study our patients that they return the compliment by studying us—a situation which I think the psychologist may sometimes overlook. " Mine is a long and sad tale," said the Mouse, in *Alice in Wonderland*. The clinician knows the importance of a clear concise history ; he must hear the tale, but dock it like other tails if need be, rather than let it grow longer and sadder with the telling.

How much of true character study is there in *The Adventures of Don Quixote* ? The novel is over-long and rather tedious in places, but it was published about three hundred and fifty years ago. In fact the author as a young man helped to prepare the Invincible Armada. First there is Quixote himself. He suffers from the delusion that he is a Knight Errant, which leads him to tilt at a windmill or attack a flock of sheep in good faith that it is his duty. He would be certifiable today. But his mental derangement is in keeping with the natural history of such disorders, because when he dismounts from his mental hobby-horse his sayings are full of a kindly, shrewd wisdom. At the time when his squire, Sancho Panza, was setting off to be the governor of an isle the knight gave him judicious advice, such as the following :

" Walk leisurely and speak with deliberation, but not so as to seem to be listening to yourself, for all affectation is bad."

" Be temperate in drinking, remembering that excess of wine keeps neither a secret nor a promise."

" Take care, Sancho, not to chew on both sides of your mouth, nor to eruct in anyone's presence."

Sancho Panza himself had a common-sense wisdom mixed up with his veneration for the knight. He claimed that if they were to be ready for battles they must be well nourished, " since guts carry the heart and not the heart guts." In which dictum he anticipates Napoleon. He liked good food but not delicacies which he said " would wrench his stomach off its hinges." He remarked, " God bless the inventor of sleep." Dickens describes a character who claimed to have an excellent memory but admitted that it did not often work. Sancho said that he had so good a memory that there would not be a better, if it were not that he forgot everything he wished to remember. The human nature described in him will help us to understand ourselves and our patients. Trotting about on his donkey he was a kindly, cheerful optimist, but like other people, had moods of depression, in one of which he said, " For everyone is as God made him, and often a good deal worse."

His wife, Teresa, in these days, might be considered a little old-fashioned. Although one should remember that an old fashion may have more vitality in the long run than something new which, for the time being, has taken its place. She says that an honest woman and a broken leg are best at home. She has the gift, which was also common in Victorian women, of keeping the men-folk to essentials. When Sancho was expecting to rise in the world, so that he was thinking his daughter might marry a count, Teresa discouraged his ambitions. She pointed out that the bridegroom would have another look at the girl and her parents, when he might see that she was only a peasant. Teresa reminded him of the proverb : " Take your neighbour's son, wipe his nose and bring him home." Adding the comment : " You bring the money, Sancho, and leave marrying her to me." In fact she is the picture of a competent wife and mother. It would be stretching it rather far to suggest that Cervantes' novel could be of use in modern Marriage Guidance. But there is something about Teresa. She did not require a course of instruction. Life had taught her and she knew. As the discussion proceeded, she accepted the burden that women must obey their husbands, even if they were dolts. At which point she dissolved into tears ; when it is probable that her arguments soaked into Sancho, and Teresa would gain the day. The conversations between this husband and wife contain many lessons in elementary psychology, which is the art of good fiction.

There may be those who would not regard Teresa as the perfect life companion. She belongs, however, to a reliable type. Sancho would know where he was with her and where to find her. The children would know just how far they could go. She said that a good day's work was the best holiday for an honest girl. When it was a case of all hands to the dairy or the hay field, Teresa must have been in her element. And a young senorita could not plead that she was studying for the Higher School Certificate.

In life you may meet some man who has risen in the social scale. It would seem perhaps that his wife has not kept pace with him. He may feel, and even say, that such is the case. Behind the scenes, however, it may be possible to recognise that the wife has been gaining wisdom as her life progresses, while the husband may have gone down in character during his upward social trend. A wife may notice that a man who has joined the big-wigs is not really one of them. She thinks rather wistfully of the capable youth whom she married. So it might be with Sancho. Teresa was a corrective. When the fine fellow was trotting about on his ass enjoying the reflected glory of Don Quixote's limelight, his wife said : " Bring your money, good husband, I don't care how you gained it, for however you got it, you won't have started up a new custom in the world."

At the end of the book we find Don Quixote in his last illness was tended with affectionate care by his niece and his housekeeper. When he died he was mourned by the faithful Sancho. In conclusion we read—" However his niece ate, his housekeeper drank and Sancho Panza was cheerful ; for legacies tend to dull or moderate in the inheritor the grief that nature claims for the deceased."

So much for some of the human nature depicted in *The Adventures of Don Quixote*. But how about the word it gives to the language ? The expression " a quixotic action " is usually intended to convey some element of devotion regardless of material personal interests—foolish perhaps but worthy of respect. But our hero carried out his exploits under the influence of a delusion. Why was it " quixotic " to attack a flock of sheep ? Even if the knight errant thought it was an army, the author is poking fun at books of chivalry with enchantments, challenges and loves. He has no respect for them. The word, however, is well established. It is too late to suggest that, in a sense, it was falsely coined.

If we leave character study and digress into detective novels we may gain lessons in observation—but very rarely in the modern " Thriller " or " Who Done It." High in the list giving lessons in observation comes *Tales of Mystery and Imagination* by Edgar Allan Poe. Sherlock Holmes uttered many shrewd sayings applicable to clinical medicine. " I see no more than you, but I have trained myself to notice what I see." " You see but you do not observe." Or again : " You did not know where to look and so you missed all that was important." Nothing could be better ; and yet some of what he saw, or the conclusions drawn, are rather less intriguing. Even in the nineteenth century Dr. Watson, because he had returned to active medical practice, need not have smelled of iodoform or had a black mark of nitrate of silver on his forefinger. Nor, I should have thought, six cuts on his shoe where a careless maid-servant had scraped off some mud. Likewise the conclusions drawn in *The Blue Carbuncle* from a bowler hat which had seen better days are almost too good to be true—but of course the event proved them correct.

If you or I, however, took it for granted that because a hat was too big for our heads it must belong to someone highly intellectual, it is more than probable that we should discover that the owner suffered from Paget's disease or hydrocephalus. Poor Old Watson—he would swallow anything. What a joy he must have been to his fellows in his undergraduate days. But it is all part of the fun and instruction in the stories. Work in the medical and surgical wards provides enough pitfalls for those who jump to conclusions.

Chesterton's Father Brown avoids such sensational methods. In *The Mirror of the Magistrate*, he came into a house to find a big looking-glass broken, a palm tree knocked over with the pot smashed all over the floor. In describing the scene he remarked, " Somehow, it looked to me as if something had happened." I will not spoil the story by telling how he solved the problem, but I like the spirit of his caution. He is a corrective for those who make unwarrantable assumptions. He knew that people tell you what they think you wish to hear. He would be a good guide in the difficult art of obtaining an accurate clinical history.

It is a waste of time to read the wrong kind of fiction. Sir William Osler spoke of doctors who got the habit of novel reading. There is so much good literature and so little time. The wrong sort of novel, when I left school, was usually about racing or a cattle ranch with some very sensational love making. Edgar Wallace was a great improvement on these stories. But I do not know about the new novels with so much sex, which presumably appeals to the Mr. Hyde, which is in most of us, and not to the better nature of Henry Jekyll. If they may be true to some sorts of life, perhaps the less said about it the better. A good corrective for such stuff would be to read the last section of Stevenson's fable, which is a beautiful piece of prose giving Henry Jekyll's statement of the case.

If we return to the study of human nature as depicted in the best novels, there is no end of it. Nor can we expect all to agree. I am fond of the *Forsyte Saga*, whereas a friend of mine told me he had never met such people. One of the characters in *Don Quixote* says, " It is the greatest of all impossibilities to write a book that will satisfy and please every reader." Many people have their favourite novel, which perhaps may be the one first read at the right time and age.

Some characters live through many volumes ; for example, Mrs. Proudie, wife of the Bishop of Barchester, who tended to out-stay her welcome. Anthony Trollope, one day in his club, heard two members discussing his novels, one of whom said he was sick and tired of Mrs. Proudie. Trollope introduced himself saying he would go home and kill her—which promise he performed.

Drawing from life may get a novelist into trouble. There is the story of Meredith, when the *Egoist* was published, and of how a young friend complained that Sir Willoughby Patterne was a picture of himself. To which the novelist replied that he was a picture of us all. One woman novelist, admitting that she drew from life, said she always pulped her aquaintances before she served them up.

If it be true that good novels help us to study human nature, would it be possible to set examination papers from them, or perhaps hold a debate for which we might have such problems as the following to discuss :—

1. Do you believe that the young ladies described by Jane Austen and the modern girl have much in common ?

2. When Mrs. Bardell so promptly misunderstood Mr. Pickwick's innocent remarks and fell into his arms ; do you consider that she was a designing female or is it possible she swooned from the emotion of wishful thinking ? In what way, if any, was Mr. Pickwick to blame ?

3. In Thackeray's *Vanity Fair*, of the four men who made love to Becky Sharpe—George Osborn, Sir Pitt Crawley, Lord Steyne or Rawden Crawley—for which of them would she have been a suitable wife ?

4. How long can a general practitioner go his rounds without meeting Mrs. Gummidge (from *David Copperfield*) with her plaint, " I feel it more than other people."

5. If the critics have called Thackeray cynical, would you consider this charge refuted by the scene described of Colonel Newcome's death.

6. If a maiden lady in *Cranford* rolled a ball under the bed, so that its appearance the other side would exclude a hidden burglar, do you think she would have been less courageous than ourselves in an air-raid ?

7. Do you know any better book on Child Psychology than *Alice in Wonderland* or than *The Golden Age* by Kenneth Grahame ?

8. In *Through the Looking-Glass*, after Alice lifted the White King onto the table, we read : " The horror of that moment," said the King, " I shall never forget." " You will if you don't make a memorandum of it," said the Queen. Discuss the significance of this for the psycho-analyst.

9. The hero of George Eliot's novel *Adam Bede* believed that "God helps them as helps themselves" was a text out of the Bible. Mr. Wilkins

Micawber in *David Copperfield* was always waiting for something to turn up. For each of these two, give a description of their probable (*a*) general physique, (*b*) facial expression, (*c*) gait, (*d*) blood pressure, and (*e*) expectation of life.

Now in the seventeenth century the choice of fiction was more limited than today. It is unwise to recommend any particular book, it may end as did the Irishman's promised treat—which did not come up to his expectations and " sure he never thought it would." It is possible to draw a distinction between novels in which the grip of the plot is the main attraction and those in which the interest comes from character study and life's problems and ironies. For the former I would suggest that a busy man should take these exciting tales in small doses at rarer intervals in the form of short stories, dismissed at a sitting. They may be considered as a holiday from (not an escape, mark you !) more serious study. Whereas the classical novel of Jane Austen, Dickens, Thackeray, Galsworthy or whomever you may chose, can be read with a book-mark slowly progressing through the chapters, as a companion to professional reading. It would be a poor compliment to suggest that these masterpieces do not occasionally keep us up late for the sake of the tale. But we re-read them for the sake of the characters. There is no hurry to read the new novels ; it is best to give them time to mature or die. The safest choice is of one which has lived and the test of its value to ourselves, that it sets us thinking about the characters when we lay the book aside and we feel we should wish to read it again some day. It is only dull folk and superior people—types frequently combined—who tell you they cannot read a book more than once.

Modern historians have a way of robbing us of our cherished beliefs ; telling us perhaps that Cromwell never said " Take away that bauble " or denying that the Duke of Wellington gave the order, " Up Guards and at them." How can they tell ? Perhaps Sydenham never mentioned *Don Quixote*, but the tradition lives because it is in keeping with his teaching that medical knowledge is gained by personal observation rather than from books.

I should not care to recommend *The Adventures of Don Quixote*, whether the copy is a modern Penguin or the famous tome with engravings by Gustave Doré. It is rather stodgy. Cervantes, nevertheless, is a pioneer of that company of novelists who have helped to enlarge the knowledge of human nature. His hero perhaps is not so important in this respect but might be regarded as a warning. Not that we need a caution against anything so daft as tilting at a windmill. Not that we should have so much prudence that we could not be quixotic. But a warning lest we waste our time, and let our minds deteriorate by reading the wrong kind of fiction.

October		ACADEMIC
		Exhibition. Surgical Department. " Bone Tumours."
8th	1.00.	Mr. Gibberd. Clinical Lecture. " Asphyxia in the Fœtus and in the Newborn."
10th	4.30.	Professor J. Z. Young. Guy's Science Club. Staff Common Room. " Learning in the Octopus and the Problem of Mechanism of Learning."
11th	1.00.	Mr. Eckhoff. Clinical Lecture. " Injection and Intubation Hazards."
	5.00.	X-Ray Meeting. Gordon Museum.
12th	1.00.	Dr. Loyal Davis, M.D., Grunow Professor of Surgery, Northwestern University, Chicago. Clinical Lecture. " The Organisation and Aims of the Department of Surgery, Northwestern University, Chicago."
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
13th	10.00.	Mr. Hermon Taylor, London Hospital. Surgical Departmental Round. Clinical Theatre.
15th	1.00.	Mr. Brock. Clinical Lecture. " Fractured Ribs and other Chest Injuries."
18th	1.00.	Mr. Glover. Clinical Lecture.
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
19th	1.00.	Dr. Campbell. Clinical Lecture.

SPORT

13th	Rugby.	1st XV *v.* Aberavon. (H.O.P.)
	,,	"A" XV *v.* United Services, Chatham. (Chatham.)
	,,	Extra "A" XV *v.* Old Whitgiftians "A". (H.O.P.)
	,,	Wanderers *v.* Old Whitgiftians Extra "A". (S. Croydon.)
20th	Rugby.	1st XV *v.* Bedford. (H.O.P.)
	,,	"A" XV *v.* Bedford Wanderers. (Bedford).
	,,	Extra "A" XV *v.* De Havilland, Stag Lane. (Hatfield.)
	,,	Wanderers *v.* De Havilland, Stag Lane. (Hatfield.)

Memories of Guy's

By A. R. THOMPSON, F.R.C.S.

Consulting Urologist, Guy's Hospital

I. THE SURGEONS AT GUY'S HOSPITAL IN 1898

(*Continued*)

ABOUT the time of which I have been writing, namely, the early years of the twentieth century, inept performances by inexperienced house-officers were unfortunately all too frequent. Another incident may well be quoted. The house-surgeon who was connected with the case had been a dental student, and whilst he was a good technician and a good operator, his powers of judgment were very poor. A man was admitted with a fracture of the mandible and, naturally, the house-surgeon was anxious to show his prowess. He so worked things that Lucas, under whose actual care the patient had been admitted, thought that Lane, his corresponding assistant surgeon, had seen the case ; Lane, meanwhile, was under the impression that Lucas had seen it. With the intention of doing some form of wiring operation on the mandible the "ci-devant" dental student had the patient brought into the theatre. F. P. Hughes—"Pa" Hughes as he was called because of his very bald head—was asked to give the necessary anæsthetic, but almost before he had started to administer it he heard crepitus in the region of the left clavicle. He refused to proceed, so the patient was taken back to the ward. Shortly after this the house-surgeon was called to the ward as the patient had urgent dyspnœa. A tracheotomy was performed without success and the patient died. Post-mortem a fracture of the vertebræ in the cervical region was found. (The same house-surgeon was reported to have opened the middle ear in order to extract a foreign body in the external meatus.) These are examples of operations that were performed by house-officers that led to the appointment of a resident surgical officer. There were other reasons. One was that admissions of ordinary patients were left entirely to the house-officers, who selected only those cases upon which they could operate without reference to their chiefs. Thus sarcomata and cancers of all kinds were refused acceptance, but a hernia or a small amputation was gladly received. As a consequence of this selfishness, serious cases suffered. Another reason for a change in the then existing methods was that Patience and Samaritan wards were intended for septic cases and for the transference of cases that became septic in the wards. But, at a later period, the house-surgeons very grossly abused their position and used to transfer there patients who were suffering from non-infectious sepsis, such as mammary abscess, and cases of colostomy for cancer of the rectum. Consequently Patience and Samaritan wards might be full of cases that were by no means septic, at any rate, infectiously. The inaction of Lucas consequently led, indirectly, to the new appointment of resident surgical officer. On the first of January, 1905, I became the first to hold this position, being followed in May, 1906, by E. C. Hughes. Later a resident surgical officer and registrar were appointed to each of the surgical firms.

It remains to say of Lucas that he was an impressive-looking man, a little dandified in his appearance. He had small feet and used to wear well-fitting boots. He took an interest in hunting, being a member of a fox-hunting pack in Sussex. He presented a cup for tug-of-war competitions between the various surgical firms and frequently attended the sports at Honor Oak Park. One could not help feeling that, on these occasions, he was courting popularity. I learnt three things from Lucas, for after he had left active work I used to meet him in the West End. Having nothing else to do he stopped to talk to me. First, when a urethra is ruptured, the rupture may not be complete and some mucous membrane may be left intact. Advantage should be taken of this in any treatment in the way of the necessary instrumentation of such cases. Secondly, people who have an enlargement of the prostate should not ride, especially those who rise slightly in their stirrups. Thirdly, when a doctor sends up a case to the hospital, the house surgeon should take it in. "One can never know," said Lucas, "the amount of personal anxiety the doctor may have experienced in connection with the case."

The next surgeon on the active staff in 1898 was C. H. Golding-Bird. Whilst he was a good operator and an admirable technician, he had a most uncertain temper. Perhaps this was due to the fact, which was reported amongst the students, that he suffered from some painful internal malady, such as renal calculus. He, like Lucas, had at one time allowed his house-surgeons to do many serious operations without supervision. But this had quite ceased when I was appointed his dresser in February, 1900. The reason was that one of these house-surgeons, like Oliver Twist " asking for more," had operated upon a case under the care of Golding-Bird without asking that surgeon's permission beforehand.

As an examiner at the College and Cambridge University Golding-Bird was both just and popular. Though he made good after-dinner speeches, he lacked the gift of knowing when he had said enough. He was, perhaps significantly, the last man to make a speech at a Guy's Biennial Dinner. I am not conscious that I learned anything from him, except in a general way.

Now to Jacobson ; what can one write about him ? Much of the difficulty in estimating his worth lay in the fact that he was, at heart, a little bit of a snob. Whilst he would make friends of students, he would never allow them to make a friend of him. He might, indeed, offer a good cigar to you, but you were never to make a similar offer to him. But he was a most generous man, and often gave help, financial and otherwise, to needy students who deserved it. He was an excellent teacher, and knew about surgery in a way that I have never known even to be equalled. His great work was, of course, " The Operations of Surgery," a book much admired in England, but especially in Scotland and America—in Scotland because of its meticulous precision, in America because in the book the author struck out a new path and encouraged new ideas, especially in the estimation of results of operations.

Jacobson was the son of a Regius Professor of Divinity at Oxford, who afterwards became Bishop of Chester, at a time when that diocese contained the great cities of Liverpool and Manchester. Jacobson knew Dean Stanley. In spirit I can see him now, meeting that gentle soul in the precincts of the Abbey, and can hear tender words coming from the Dean, which must have made Jacobson's sensitive conscience smart at times.

Perhaps students at Guy's Hospital have rarely reflected upon the difficulty the surgeons here may have in teaching their classes. Jacobson, for instance, used to say that it was easy enough for a surgeon at the Middlesex Hospital or University College Hospital to walk from Harley Street in the morning, find out what cases had been admitted to his beds, then return home and look up the appropriate literature. It would require a very considerable amount of energy for a surgeon at Guy's or the London Hospital to adopt a similar plan. Sir William Hale-White suggested to me that going down to Guy's quite unprepared and conducting a teaching-round was a great deal more difficult than the management of a legal case by counsel. I am not sure that the quoting of literature is essential for good instruction. Jacobson, however, could do so glibly, without any preparation. I recollect him animadverting against a surgeon on the staff at St. Thomas's Hospital, who was an examiner at the College at the beginning of the century. It was said that this surgeon had boasted that he never read a text-book after the day on which he became qualified. Jacobson thought that this was a very wrong attitude to adopt. Though personal experience may be invaluable when demonstrating in the wards, not to have read the opinions of others obviously leads an examiner to adopt very strict and narrow standards when dealing with candidates from other hospitals.

In addition to teaching well at the bedside, Jacobson gave very good clinical lectures. He made very elaborate preparations for them, including a quarto sheet upon which was printed a synopsis of what he was about to say. Milton commences all the various books of his greater poems with what is called an argument. It would be well if authors of papers would imitate the examples of both Milton and Jacobson by giving a general introduction before proceeding to details. Jacobson's clinical lectures were easily the best attended of any I have known. The students allowed him to speak to them in a way that they would not have condoned in any other teacher. He would insult them by drawing attention to the personal characteristics of body and of mind, but there was no malice in his assertions. He was a great worker but, in spite of this, would take in lodgers from amongst the students at his house in Finsbury Square where, at one time, several consultants, chiefly of the London Hospital, resided.

It is recorded that, on several occasions, he stayed up all might working at the " Operations of Surgery " and then walked to Guy's Hospital in order to deliver a lecture on anatomy at 9.0 a.m. He once proclaimed on the disadvantages of high heels for women, procuring numerous pairs of shoes either by purchase or loan, in order to illustrate his contentions. What his reactions would be to the shoe fashions of today I cannot say, but the ladies are probably the best judge of their own comfort.

When it came to my turn to receive instruction from Jacobson he made me the butt of much of his abuse because, he said, I appeared to bear him no grudge. He came down to see his out-patients on Wednesday afternoons, on which days travelling on the trains from the country was cheaper than on other days of the week. He arrived punctually at 1.0 p.m. and partook of a biscuit or two and some sherry out of a by no means small flask. Thereupon he began to see his patients and continued to do so until 6.0 p.m., or even later.

In spite of Jacobson's enormous knowledge he was considered by some of the physicians, unfairly as I think, not to be a good operator. Consequently, he was seldom called in for consultation. If some of the physicians of the last century had received instruction from W. H. Ogilvie and had learned from that distinguished surgeon that technical ability was only one part of a surgeon's outfit, they might have called in Jacobson more frequently with advantage to their patients. Incidentally, Pye-Smith had openly boasted about that time that for a case of intussusception he had adopted the plan of rolling the patient over and over in bed. He went on to describe the relief *he* felt when the patient passed flatus and borborygmi were heard ! Jacobson was most certainly a good operator on cases of cancer, especially of the tongue, and published some good results in this affection.

Late in his surgical life Jacobson went to live in the country on the pleasant borderland of Sussex and Kent. It was here that the great tragedy of his life occurred, when his only child, a boy, was drowned in the garden pond. This happened in 1904 and Jacobson retired from the active staff immediately afterwards, but he continued to examine at the College. Jacobson never forgot, and I do not think he wanted to forget, the disaster of the boy's death and the failure of his earthly hopes. I saw him last at his home in 1907 and brought up a crateful (or was it a hat-boxful ?) of roses from his garden as a present to my wife. If I had sent him a collection of orchids from Bond Street he would have refused them and have written an angry letter in acknowledgment !

His greatness as a surgeon consisted in his great knowledge, in his sound judgment, in his ability to express his thoughts clearly and in his fine literary style. One can have knowledge without good judgment, but Jacobson had both qualities in no small degree.

Next to Jacobson, in order of seniority, came Charters Symonds. I acted as dresser to him when he was assistant surgeon, at time of the outbreak of the South African war in 1899. One of the operations that I then saw him perform was on the gall bladder, and I learnt from him the efficacy of boric acid powder as an aid in arresting hæmorrhage. I also saw him remove a cystic kidney. (Though such a course is, I believe, still advocated by some Australian surgeons, it is not a practice generally accepted today. Many years ago I collected the notes of autopsies on such cases. They were some twenty-five to thirty in number. It was found in this short series that the average age of death with cystic kidney was very nearly sixty and that many of the patients died from other than renal disease. Moreover, analysis by age groups suggested that the cystic process was bilaterally progressive and, therefore, unlikely to be improved by unilateral nephrectomy.) Symonds eventually became vice-president of the Royal College of Surgeons, and was made a Knight. In 1903 I became his house-surgeon and the plan was adopted of having the bed of the patient upon whose case he was teaching drawn out from the wall into the ward. By this means there was more room for students and more air for the patient. Surgical registrars might find this idea worth their adopting.

There is no doubt that Symonds was a great teacher. I well remember a man of middle age with a lump in the left side of the neck. Symonds, after some splendid and impressive demonstrating, diagnosed the lump as being due to primary epithelioma in the cervical glands. (When, however, he went on to say that he had seen three similar cases in the last month we were all a little sceptical.) The sequel of this case was very interesting. Symonds was a master of surgical method when operating on the neck. He removed the glands after an extended dissection, which reached downwards behind the left clavicle. When the operator was working behind this bone, something very like a frog's lung sprang up into the wound. After expressing some surprise, Symonds sponged the swelling with some considerable force. It disappeared at once. Eventually all the visible malignant glands were removed, the wound was sutured, and the patient was put back to bed. In two days' time the whole of the left side of the head and neck, the left upper limb, and the whole of the body and lower limbs were affected with a brawny swelling. Clearly the thoracic duct in the neck had been damaged. Fortunately the swelling did not become septic. It went down and the patient recovered. I believe, though, that a carcinoma of the larynx developed later. I dread almost to think of the possibilities in this case if the wound had gone septic, but fortunately the dresser was a keen and intelligent man who realised the potentialities of the case and took precautions accordingly.

I should like here to acknowledge the deep debt of gratitude that I owe to W. H. Bowen who was my predecessor in Symonds' house-surgeoncy. One thing he taught me which stood me in very good stead. He advised me to take in all head injuries that I was called to see in the front surgery. I never regretted doing so. I very quickly found out that some head injuries became worse after admission to hospital and all required careful attention for at least three weeks after the injury. Bowen taught me also the danger that might accrue to patients when one house-surgeon " handed over " to another. He and I went round the wards when I succeeded him and there was a patient about whose condition Bowen was obviously anxious. After reduction of an inguinal hernia this man began to vomit, but Bowen thought that he was a little better when we saw him together. He continued to vomit and when Symonds saw the case he diagnosed " reduction en masse." Operation, performed at once, confirmed this fear. Despite this surgical intervention, however, the patient rapidly sank and died.

Amongst the many things that I learnt from Symonds, often in chatty talks upon the telephone, was that for a surgeon to attempt to prolong life under conditions of great distress might not be the best treatment for the patient. A boy had a retropharyngeal sarcoma and was suffering from great pain and distress. Later he developed severe and most trying dyspnœa. I suggested that a tracheotomy might be advisable. " Do a tracheotomy on no account," said Symonds in reply. " The boy is in great distress. Even if this be relieved by the operation it will do no good to the original trouble. It will not prolong life, except by causing a great deal of further distress." Symonds took a very grave view of the sudden cessation of pain during an attack of appendicitis. He regarded this as an indication of perforation, calling for immediate operation. He also took a very great interest in fractures, and had good results. In the cases of fractured femur that I saw the average amount of shortening was under one inch. There was some overlapping of the fragments, but very good callus was formed. One case, a boy of sixteen, was asked to come up to the hospital for examination six weeks after the injury. There was practically no shortening and the boy told me that he had run all the way up to Guy's as he feared he might be late !

Symonds would have written an admirable book on surgery. He never did, although one was confidently anticipated. After he left London he went to live at Harrow and used to come every week to Lambeth Hospital in order that he might see cases there. Stebbing, a later house-surgeon to Symonds, told me that his teaching at Lambeth was truly wonderful and the interest he displayed was phenomenal for a man of nearly eighty. It was always a pleasure to see him walking in the West End after he had retired, for he wore the garments of old age with grace and distinction.

There is a good story of Symonds which must be related. He was accustomed to using Murphy's buttons long after most surgeons in this country had dispensed with their use. He used, I think, far too large buttons. One day he was in high spirits as some American visitors had came to Guy's in order to visit his clinic. He was pointing out his experience of Murphy's button and suddenly broke off his teaching to tell his ward clerk to go down to the post-mortem room in order to retrieve a specimen of rectum in which a button had become impacted. The ward clerk, a very simple fellow, soon returned and said to Symonds, " Here is the specimen, sir ; and Bell (the then mortuary attendant) says there are five more if you want them."

The next surgeon, in order of seniority, has an honoured place in surgical domains. I saw him two or three years before he died and his mind was as active as ever. He had sustained, so he told me, a fracture of the pelvis, but could not find one of his old house-surgeons who would wire it. After saying this it is hardly necessary for me to tell you that the surgeon in question was Sir Arbuthnot Lane. He was great indeed. A pioneer in the surgical treatment of mastoid disease, of empyema, of cleft palate, of abdominal disease, a master of surgical technique, and a past-master in the art of diagnosis, he must rank only with the very highest. Completely at home in any field of surgery, I never saw him perturbed by any surgical emergency. I remember it being recorded that when he was operating on a distinguished professor of physiology, in the presence of another distinguished physiologist, he removed the whole of the colon for cancer, chatted pleasantly the whole time, never let a drop of blood escape and never forgot for one moment what he was doing. He impressed the observer enormously. When I was a dresser, I sent a patient to Lane with the diagnosis of acute inflammation. The lesion was, in fact, a fracture of both bones of the forearm. " Poor Thompson," said Lane, " He never will make this mistake again." It was the kind of remark that, for the thinking man, made Lane really an excellent teacher. He seemed to put a man on his mettle. I do not think that he ever taught his methods, but they were followed by his devotees and Fagge, for instance, adhered to them throughout his career at the Hospital. Lane was always a good anatomist. He did valuable work on the skeleton and, in particular, the shape of the bones in connection with lines of pressure. His research was essentially individualistic and his observations would have been clogged by anyone lacking a similar originality.

Next in order to Lane was L. A. Dunn. He was probably one of the most popular men at Guy's during the period of which I am writing. Familiarly known as " John " Dunn, he was very affectionate in his greetings to the younger men about the Hospital. But he was, essentially, a sane and just man, one who would not tolerate anything short of the best work, either physical or mental. Unfortunately he suffered from no lack of money and his ambition was not to fill one of the seats of the mighty, but to insure that those who sat in less exalted places sat in them comfortably and filled them adequately. Dunn was a very handsome man with dark hair, a big black moustache and a firm chin. He would have been even more handsome had he not been very sallow, a colour which I have always associated with the possible occurrence of cancer, of which disease he actually died. His face, even after he had returned from a shooting holiday in Sussex, where he had a house, never showed the flush of health, but he was an indefatigable worker. He died in Bright ward. A secondary deposit had developed in one orbit and he told me, shortly before his death, that the diagnosis of this was quite inaccurate. This remark caused considerable alarm in my mind, not because of the malignant disease, but because, as a diagnostician, he was probably the best at Guy's in the first twelve years of this century. He never would have allowed anyone else than himself to have made such a mistake. He was a good operator, but, unlike Lane, liked incisions of just sufficient length to permit of complete and accurate surgical treatment of the condition for which he was operating. He was a little petulant when operating, and I think that he needed a strong and able house-surgeon to curb this tendency. Yet he was a most humane and sympathetic surgeon. For Dunn I never acted as dresser or clerk, but I was his house-surgeon at Shadwell Children's Hospital in 1902. He taught me a great deal and I wish that I had learnt more than I did from his sympathetic attitude to patients. After his death I was speaking to Sir Cooper Perry. I said how sorry I was that Dunn had not written a book dealing with surgery. " Well," said Perry, " his verbal teaching will last for as long a period as most books which deal with medical subjects." It is curious how short a course the average text-book of surgery or medicine runs, but across the years I can still hear Dunn's voice and it makes a booming, not a whispering, sound. " Will you take this case into the Hospital ? " said John Dunn to me once when I was " take-in " house-surgeon. " Of course," I replied. " You see," he explained, " this poor woman has a growth of the bladder ; she is losing a great deal of blood, and I fear to do much at out-patients, lest she die." I took the patient into the wards, but the surgeon under whose care whe was admitted, not having at all the same kind of thoughts as John Dunn, dilated the urethra with his index finger, which did not err on the side of smallness, and thought that he felt the tumour. With my experience now, I should be inclined to doubt the truth of his statement, but his rough examination certainly killed the patient, for she died in less than two days after the investigation.

I remember several cases of interest with which Dunn was connected. The first was the best example of short and clear reasoning that I have ever heard. A little Jewish boy had been admitted to Shadwell Children's Hospital one day and Dunn came down from his house in Devonshire Street on a rainy Saturday afternoon. He said the boy had intestinal obstruction and that there was fluid in the abdomen, but as the temperature was not raised the fluid could not be purulent. The case, therefore, must be one of tuberculous peritonitis and the obstruction must be due to a band. He performed an operation, which very exactly confirmed his diagnosis, with cure of the patient. The second case was that of a man who was seen by me at the end of 1903 when I was resident in Bright ward. Owen Richards, an intimate colleague who eventually reached a distinguished position at the Kasr-El Ainy Hospital in Cairo, sent the patient to me. He had a sore place on the dorsum of the foot. Richards had already failed with an attempt to skin-graft and I had no greater success. I took the patient down to see Dunn at his clinic. He looked at the sore place for a moment and quietly said, " My dear, have you tried potassium iodide ? " I had not, but I did, and the sore was healed in a fortnight's time ! The patient, alive and fit more than thirty years afterwards, was doing well as a caterer in the City when I called upon him in 1936. A third case may be noted here, mainly because of its anatomical interest. A boy was admitted under Mr. Dunn's care with a small wound in the right palm. The house-surgeon was unable to stop the bleeding and tied the radial and, later, the ulnar arteries. The bleeding continued and the boy died. It was found then that the " comes nervi mediani " formed a large part of the palmar arch. Though not a common occurrence, this is an aberration which must always be borne in mind. The importance of real anatomical knowledge is demonstrated by this case. Dunn himself was accustomed to read every night some part of the 10th edition of Quain's Anatomy. His favourite beverage on these occasions was, I am told, beer and water, half-and-half. He enjoyed life to the full and the best dinner, without exception, that I ever attended was at his house in Devonshire Street shortly after I had been appointed surgical registrar. He never married, and when expostulated with by a friend on his omission, who said, " When you want help you will have a wife with you." Dunn answered, " Yes, and when I don't want her, she will still be with me."

(*To be continued*)

A CENTENARIAN

Congratulations and good wishes are offered to Dr. E. Clifford Beale, of 21, The Gateway, Chelsea, S.W.3, who will be celebrating his hundredth birthday on October 16th. He came to Guy's in 1874 and became House Physician in 1878. He addressed the Physical Society in 1893, the subject he chose was " The advantages and disadvantages in making mistakes." Dr. Wilks was in the Chair.

Nurses' Prize Day

THE annual presentation of prizes and medals took place on Thursday, 20th September. Lord Cunliffe and Matron received a large number of visitors in the Nuffield Nurses' Home where an enjoyable tea was served at 4.0 p.m. It was a great pleasure to welcome so many parents, representatives of other hospitals, members of the Staff and their wives and members of the Board of Governors.

After tea, the Physiology Theatre, kindly lent by Professor Spurrell, was soon filled to capacity. Lord Cunliffe, Chairman of the Board of Governors, presided and gave a short address of welcome. He reported that this was the first time that the student nurses of the Evelina Hospital were receiving prizes at this joint function.

The Sister Tutors then gave a brief report on the work of the past year and Sister Falwasser of Job Ward gave a picture of the nurses' work in the wards. The Matron also welcomed the visitors and spoke of the object of the nurses' training, which was not only to make good technical nurses but to train nurses in a much wider sense, to help them to understand their patients' background and difficulties.

The Superintendent, Mr. Doherty, also welcomed Professor Johnston, whom, he said, needed no introduction. He congratulated the sisters and nurses on their high standard of work.

The prizes were then presented by Professor Johnston :—

Pharmacology :

1st Prize	*2nd Prize*
S. Taylor	M. R. Lee
I. Crompton	M. M. Webb
J. Webster	J. Golder
P. Jowett	M. McNair
	J. Hern

Surgery and Surgical Nursing :

1st Prize	*2nd Prize*
M. R. Lee	J. Lidstone
S. Paul	J. Weller
S. Lloyd	J. Cartmell
	F. Gilroy
	R. Leigh

Medicine and Medical Nursing :

1st Prize	*2nd Prize*
L. Sankey	J. Broadburn
E. Ireson	M. Colcutt
J. Dodd	N. Finch
	M. Blundstone
	J. M. Carter

Special Diseases :

1st Prize	*2nd Prize*
G. Ham	J. Greenwood
E. Ireson	D. Johnson
E. Lazenby	M. Banham
	J. Bedford

Guy's Final Examination :

1st Prize	*2nd Prize*
E. Whileblood	S. Campbell
N. Thompson	J. Greenwood
P. Ashworth	E. J. Riley
N. M. Thomas	L. Sankey

The Evelina Hospital for Sick Children.

SURGERY AND SURGICAL NURSING	S. Gibbs
SPECIAL DISEASES OF CHILDREN	D. Wingrove
MEDICINE AND MEDICAL NURSING	D. Wingrove

Hospital Final Examination :

1st Prize	C. White
2nd Prize	M. Neeve

Medals : Awarded to the nurses obtaining the highest aggregate number of marks in all the examinations and taking into account their record of practical work.

Gold Medal	P. Ashworth
Silver Medal	P. Slade
Bronze Medal	E. Bailey

Butterworth Medals : Awarded after seven years' consecutive service, to :—
Madeline Davis
Joan Hill
Pauline Wolley
Betty White

Professor Johnston's address followed. He spoke of the high standard of nursing care given to the patients at Guy's and paid a special tribute to the sisters. He congratulated the prize winners and also those who had not received prizes. The possibilities of a useful and happy future were equally available to both.

Professor Johnston then gave a graphic description of the work of the Guy's nursing staff during the war. He recalled many occasions which followed the September of 1939 when the Guy's nursing staff were scattered throughout Sector 10. How vividly some of us remembered the marquees with the rain dripping through ; such things were taken in our stride and the humour of many of the situations helped us to face the sadness and difficulties at the time of Dunkirk and the days which followed. Professor Johnston was most generous in his expressions of appreciation of the work done by Guy's nurses during those years. He then spoke of the possibilities for the future and in his meticulous way, so characteristic of him, he surveyed progress during the past 50 years ; financially he calculated that if salaries increased at the same rate during the coming 50 years, by the year 2,00 matrons would be millionaires and their staff correspondingly affluent !

A vote of thanks was proposed by Nurse Whileblood and seconded by Nurse Thompson.

Obituary

PETER GEORGE McEVEDY, M.B., B.S., F.R.C.S.

PETER McEVEDY, Senior Surgeon at Ancoats Hospital, Manchester, was one of the founders of the Surgical Travellers Club in 1927, and in the quarter of a century he never missed a meeting. He was in Copenhagen at Whitsun, as charming and energetic as ever, and looking better than usual. He did his last operation before the Association of Surgeons in July. He died last week.

McEvedy held an almost unique position in surgery. He was the best operator that Guy's has produced, and possibly the best operator in the world. I make this statement soberly, having in mind today's leaders in many countries and such giants of the immediate past as Kirschner, Wilkie and Moynihan. His gastric work attained a perfection that I have never seen equalled by anybody. His thyroid operations, done almost entirely with the knife, were just so much better than the work of the best thyroid surgeons in England and America that they left the spectator with a sense of frustrated humility ; here was a standard that no ordinary man could attain. He was sure, he was deft, he was gentle, he was bloodless.

His example did much to rehabilitate the Billroth I gastrectomy within recent years. His operation for femoral hernia, published in the Annals of the Royal College of Surgeons, has replaced all others in the hands of those who have once tried it. He was, however, much more than an operator, and it was impossible to spend a few hours in his company without absorbing some of his philosophy, without learning a great deal of value. He was perhaps at his best as a post-graduate teacher and an instructor of young surgeons.

Peter McEvedy was never as widely known as he should have been. He did not bring his wares to the market place, but was gentle and truly humble. Though he had much to say and could say it well, he wrote little and seldom spoke in public. His poor health kept him from social functions, but he found happiness in his home life and in the company of his friends. To his pupils and those who knew his work he had no equal. W.H.O.

Reviews

Preventive Medicine and Public Health. By FRED GRUNDY. Leagrave Press. *Price* 18*s.*

The writing of a textbook, especially a short textbook, of Preventive Medicine and Public Health must be an exacting task. There is a vast field to choose from and at the same time the author must keep an eye on examination requirements which may not always fit in with his own idea of what is needed by the student. Professor Grundy has handled the job in an imaginative, interesting and informative way. He has put medical undergraduates and graduates who require a review of public health problems and policy today in his debt by bringing out the best book of its kind yet produced in this country. With a copy of " Grundy ", and some reference elsewhere, for example to the techniques of sanitary practice such as water, milk and food control and to problems of industrial health, the medical student should be equipped not only to pass his examinations in Hygiene but but also to widen his horizons as a medical citizen.

Medical training in the teaching hospital is necessarily largely concerned with diagnosis and treatment of the individual, but some knowledge of Public Health which deals with the problems of health and disease in the group is essential if the doctor is to have a picture of the world in which he is going to work. Disease problems are not stereotypes, the same for all communities and at all times. Yet this impression may grow if uncorrected by a study of the natural history of diseases and their associations in time and place. Scarlet fever is a relatively mild disease today in this country, but as Grundy points out it has had cycles of mildness and severity in the past. It was mild during the middle years of the seventeenth century and severe at its close, mild and severe twice more between the early eighteenth and early nineteenth centuries, and an important killing disease between the middle of the last century and the early years of the present century. We are not entitled to say that scarlet fever will probably become a severe disease again in the future, but the possibility has to be bourne in mind. Geographical, social and instructional features may alter the picture of a disease problem as it affects different groups.

It is important also to know something about the services available for dealing with community health problems. The policies involved affect every doctor directly or indirectly, and it will often be necessary to use these services to get help for the individual patient or his family. For example, it may be as important to know what sort of schools are available for the handicapped child, as it is to know what drugs to prescribe when he is ill. The patient in hospital is necessarily seen in surroundings which are artificial as far as he is concerned. It is therefore important that the medical student should have some idea of the problems of health in their natural setting. Grundy quotes from Professor Raymond Allen who stresses the need for, " an understanding of the structure of our society, the pattern of urban and rural living, and the functions of the family, the community, the government . . . . The student must be helped to understand, that it is not the individual, but the family, that is a biological and social unit ; that when one member of that unit is involved in difficulties of any kind, all are involved." This has some relevance at a time when we are told that the general practitioner has become a family doctor. J.H.F.B.

The Essentials of Modern Surgery. Edited by R. M. HANDFIELD-JONES and SIR ARTHUR E. PORRITT. 4th Edition. Livingstone. *Price* 55*s.*

With the ever expanding fields of modern surgery and the great mass of information accruing from vigorous biochemical research, the task of producing a general textbook, of a size that will not daunt the most avid, becomes increasingly difficult. The authors of this book are to be congratulated on the way in which this problem has been faced and on the general production which presents clearly the principles of surgical practice. The temptation to expand this 4th edition has been resisted, a most welcome attitude at a time when the student is burdened with much that will not materially add to his ability as a practising and practical doctor.

The standards of writing, illustration, and production are a credit to all concerned, and the book is unreservedly recommended to all who seek a standard surgical textbook. P.G.L.

A Short Textbook of Midwifery. By G. F. GIBBERD. 5th Edition. Churchill. *Price* 25*s*.

It is difficult to believe that this book, now so firmly established, was first published as recently as 1938. That it has already run into five editions with two reprintings is a good indication of the place which it has made for itself.

The illustrations are excellent, clear, to the point and well situated. The text, throughout, is a splendid example of clear thinking lucidly expressed, neither exuberantly verbose or niggardly brief, neither extravagantly supporting or unduly condemning the unproven, nor, for the proven, lacking in dogmatic support. This fifth edition has been refreshed but it is essentially the same book which is recognised by the present generation of students and the younger generation of general practitoiners as '*the*' short textbook of midwifery, and which is refered to by a multitude of junior (and for all I know, senior) obstetricians when a balanced and authoritative opinion is required.

If Mr. Gibberd takes to Australia no more than the sound and simple teachings propounded in this book, he will gain more credit for the British practice of obstetrics than a shipload of learned professors, their cabin trunks laden with research. H.A.R.

The Story of the Growth of Nursing. By AGNES E. PAVEY. 3rd Edition. Faber & Faber. *Price* 20*s*.

Miss Pavey is no scholar. In the latter part of her book, which deals with such every-day matters as the Red Cross, the College of Nursing, Florence Nightingale and so forth, no scholarship is needed and she is on firm ground ; but in her earlier chapters, in which she sets out to describe the art of nursing in ages long past, she fails from lack of scholarship. When I explain that Miss Pavey rashly quotes two lines from the *Hippolytus*, puts them into the mouth of a character who does not appear in the play, mistranslates them, interpolates two words which quite alter the sense and from these false premises invites us to the entirely erroneous conclusion that the women of the chorus were doctors and nurses, whereas in fact they were ladies of the court of Theseus at Troiyen ; when I could subjoin many other instances of remarkable logic, such as that since at the palace of Knossos there were elaborate sewers, there must also have been nurses in Minsan Crete ; when I could point to such strange beliefs as that Cybele was a witch and Circe the daughter of Hecate, the Iliad " an actual narrative of events," the Romans in part descended from the Dorians, or that Medea " turned dignified persons into absurd sentimentalists " ; when I recount my astonishment at meeting an emperor Vespasia, a god Dionysius and Flavine Cæsars ; when I add that Miss Pavey, like so many persons with untrained minds, is an exponent of jargon, such as, to give but two examples, " He took cognisance of the world around him and bent his faculties to the understanding and utilising of the forces of nature in furtherance of his own well-being " (He looked about him and began to make use of the forces of nature), or, " Not only is his religion determined by the realization of his bodily needs, but his attitude to his body will be, to a very great extent, dependent upon his religious beliefs " (His religion is determined by the needs of his body and his attitude to his body depends upon his religion) —Why, then, we may conclude that Miss Pavey is one of those light-hearted females without a glimmering of scholarship who genuinely believe that an accumulation of inaccurate, second-hand knowledge and a freely running pen are a satisfactory equipment for writing a book. She is right to this extent, that small though her knowledge is of the matters with which she deals, the knowledge of her readers generally is likely to be zero. At any rate, her book is in its third edition and it has a preface from Sir John Weir telling us how much happiness she had in writing it. For my part I retain the belief that those who disseminate knowledge have themselves a duty to know. H.St.H.V.

THE WILLS LIBRARY STOCKTAKING

The recent stocktaking carried out in the Wills Library discloses several losses and it is felt that they have been borrowed without signature. Therefore, it would be appreciated if all books and periodicals borrowed from the Wills Library could be returned without delay.

G. A. R. WINSTON, *Wills Librarian*.

Correspondence

Memories of Guy's

SIR,—Mr. A. R. Thompson's very kind remarks about my father's work came as a pleasant support to my letter which by chance coincided with the dispatch of his. One correction I should like to make is about the Harriet Wainwright case and that is the name of the expert was not that of Dr. A. S. Taylor—the report of the trial being, of course, in his standard Text Book on Medical Jurisprudence—but another gentleman. The latter believed " that the woman had borne children but he believed it to be impossible to give a positive opinion by inspection of the uterus." (See the Trial of the Wainwrights, by H. B. Tring, p.124, published by Hodge, 1920). But my father clinched the case for the prosecution by having inspected and compared the uterus with those in Guy's Hospital Museum and the parous cases were similar to it. Further, when challenged by counsel for the defence that Dr. Meadows' (an obstetrician) text book gave different measurements, he asked the date of the edition and, as he guessed, it was an earlier one, the data of the measurements having later been corrected. Dr. Meadows thought the uterus had not been pregnant but the comparison my father had made in the Museum caused collapse of the defence.

Yours, etc.,

R. LARKIN.

44, Trinity Church Square,
Southwark, S.E.1.

Guy's Science Club

SIR,—May I make use of the *Gazette* to offer a warm invitation to all members of the Teaching and Research Staffs of the Hospital and the Schools to attend the meetings of the Guy's Science Club during the coming session ? Meetings are usually held on the second Wednesday in each month during term at 4.45 p.m. (tea at 4.30 p.m.) in the Staff Common Room, by kind permission of the Dean. Notices of the speaker and subject are given both in the Guy's Diary and on various notice boards about the Hospital precincts.

The first meeting of the new session will take place on Wednesday, October 10th, when Professor J. Z. Young will show a film and read a paper entitled, " Learning in Octopus and the Problem of the Mechanism of Learning." Newly appointed members of the Staffs will be welcome at this and all subsequent meetings.

Yours, etc.,

D. J. ANDERSON,
Honorary Secretary,
Guy's Science Club.

Physiological Laboratory,
Guy's Hospital, S.E.

Guy's Men in Wessex

SIR,—You were kind enough to publish my letter in June suggesting a Society of Guy's men in the West Country. It has now been decided to hold the first meeting at the County Hotel, Taunton, on Friday, 19th October. Time, 7.0 p.m. for 7.30 p.m. dinner, followed by a discussion over coffee on the form the club should take. All Guy's men and their wives who can attend are asked to let me know as soon as possible so that the usual arrangements can be made.

Yours, etc.,

A. M. McCALL.

Orchard House,
Crewkerne, Somerset.

Passim—Hospital Management

SIR,—I was interested in your observations on hospital management in Passim (August 25th). Sir John Conybeare in his rejoinder (September 8th) draws attention to the privileged position and degree of autonomy enjoyed by Teaching Hospitals under the National Health Act and challenges some of your statements.

I feel sure that as regards Provincial Non-Teaching Hospitals your contention that medical men have lost influence is only too true. As an illustration allow me to quote the case of the Torbay Hospital. This is a District Hospital of 170 beds, providing a consultant service for a population of about 150,000. Before July, 1948, it was directed by a Court of Governors numbering 45, which included 12 of the Visiting Medical Staff. This may seem an unduly large body, but many professions and trades were represented and an expert opinion was immediately available on most of the problems arising in hospital administration.

Today the Torbay Hospital is controlled by a Management Committee of 21, whose offices are situated somewhat remotely at Newton Abbot. There are 4 medical members of whom, only 1 is a member of the medical staff of the Torbay Hospital, the others being general practitioners from surrounding towns and villages.

Some of us think there is something wrong with the present hospital system due, we believe, to a constitutional defect.

Yours, etc.,
W. H. BRADBEER.

Lew Side,
Meadow Road,
Torquay.

Sport

RUGBY

Guy's *v.* Blackheath

At H.O.P. Result—Lost 3—12
22nd September, 1951

Sunny weather and a fairly hard ground were the conditions under which Guy's and Blackheath met in the second home match of the season. Guy's were unfortunate in losing the game which might easily have been won had there been better finishing.

Before Guy's had settled down Blackheath scored from a three-quarter movement. After this set-back Guy's had a fair share of the ball due to superior line-out work and some excellent hooking by D. Clark. Blackheath scored a second unconverted try before half-time and Howells at full back saved a certain try a moment later with a first-rate tackle. Just on half-time, after two previously unsuccessful attempts at goal, G. Davis made the score 6–3 with a good kick.

For the first twenty minutes of the second half Guy's were on top with Pook, Davis and Meredith outstanding in a lively pack. James had a couple of good runs on the right wing and with a little more room would have scored. The forwards crossed the Blackheath line—Hillman touching down—only to be called back for a previous infringement. Against the run of play Blackheath increased their lead with a penalty goal when one of the Guy's pack was off side and a try in the corner just on no-side following a short bout of passing by the Blackheath forwards which gave their right wing a clear run-in.

Team : W. J. Howells ; E. O. James, J. W. Osborn, S. C. C. Scott, J. C. Kingston ; T. Smith, R. K. Knight ; L. M. Hillman, D. L. H. Clark, D.C. Lee, J. C. Burt, C. W. Pook, H. C. Meredith, W. G. Davis, D. P. Honey.

Guy's *v.* Old Whitgiftians

At H.O.P. Result—Drawn 0—0
29th September, 1951

Guy's kicked off on a fine sunny afternoon—the turf being much softer than on the previous Saturday. Old Whitgiftians were the first to apply pressure and when Guy's were penalised near their " 25 " the ball hit an upright—but went right away for the Hospital.

From that point onwards Guy's became a little more co-ordinated and Davis was close with a penalty goal. Even so the ball got out to the wings very slowly and although James had one run before being bundled into touch, there seemed little aggressiveness in attack. Old Whitgiftians looked even more unlikely to score. Howells was always safe at full back.

In the second half Guy's made several determined efforts to score—Kingston being unfortunate to step into touch just before touching down. Guy's continued to get a fair share of the ball from the " tight " and line-out, and in the last twenty minutes showed some life in the " loose " with Meredith, Pook and Clark always prominent.

However, inability to give and take passes at speed was a fault from which both forwards and three-quarters suffered.

Prior to the game with Old Whitgiftians J. W. Kirkbride was elected Vice-Captain of the Club.

Team : W. J. Howells ; E. O. James, J. W. Osborn, S. C. C. Scott, J. C. Kingston ; T. Smith, R. K. Knight ; J. W. Kirkbride, D. L. H. Clark, D. C. Lee, J. C. Burt, C. W. Pook, H. C. Meredith, W. G. Davis, B. J. Cremin.

Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Registrar** in the **Department of Preventive Dentistry** with attendance on 6 sessions per week to commence duties on **1st November, 1951.**

Salary will be at the rate of £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **12th October, 1951.**

DENTAL SOCIETY BALL

The Guy's Hospital Dental Society Annual Ball will be held at the Grosvenor House, Park Lane, on Friday, 16th November, 1951, from 8.0 p.m. to 1.0 a.m. Evening dress and full buffet. Tickets 25*s.* each single from M. S. Tyrell and J. Cautley (Hon. Dance Secretaries).

PASS LIST

UNIVERSITY OF LONDON

Special First Examination for Medical Degrees

June, 1951

E. L. R. Andrews
B.W.G.McG.Beeching
Mary E. Braithwaite
D. R. Burcombe
J. E. A. Chiappe
N. R. Cooke
N. L. Crabtree
C. D. W. Davies
M. R. Davison
J. O. O. Fajemisin
P A. French
W H. Gibson
I D. Green
A R. Grice
R. S. Henderson
L. M. Hillman
E. D. Keen
R. F. King
K. Kitiyakara
C. J. Lambert
T. M. C. Lindsay
D. A. Logan
L. B. Lux
M. B. R. Mackenzie
J. A. Morgan
K. J. Morison
Moira M. Murphy O'Connor
J. W. Osborn
J. Payan
R. A. Peebles
D. A. Rees
R. W. Salmon
H. R. Singer
E. E. Smith
R. D. C Southcott
E. J. Taylor
K. T. Tighe
D. Wilson
P. J. E. Wilson
Gillian Wood
C. D. Wooding
M. J. Young

Second Examination in Dental Surgery : Part I

July, 1951

T. P. Bass
C. P. Briggs
I. M. Briggs
I. Caldwell
D. A. Coppock
P. L. Cummings
P. Degens
P. H. Goddard
M. S. E. Gould
H. C. F. Hudson
J. N. James
D. A. Lambert
J. D. Lane
J. S. Lee
P. A. Long
M. J. O'Brien
P. W. Pollock
B. H. Pritchard
M. J. N. Segerdal
D. J. Veale
P. J. Wege
P. E. Williams

Part II

L. J. Cheeseman
M. W. Cooksey
Helen C. Cummins
D. P. Fawkner
D. S. Noble
D. C. A. Picton
D. J. Wicker

GUY'S HOSPITAL CHRISTIAN UNION

Meetings will be held on Thursdays during the Autumn term at 5.0 p.m. in the Dental Theatre, as from October 25th, to which all members of the Hospital community are welcome.

Details of these and of other activities will be found on the notice board in the Colonnade.

Of special interest is a meeting on Thursday, October 18th, at 5.0 p.m., in the Physiology Theatre, when Ernest White, Esq., M.B., B.S., will give a talk entitled, " A Psychologist Looks at Right and Wrong."

In addition, the Union will be inviting freshers to tea on October 9th, when a talk will be given by Neville Everard, Esq., F.R.C.S., Edin., D.T.M.

A. T. TARRANT,
President.

STUDENT CHRISTIAN MOVEMENT

There is a branch of the Student Christian Movement in Guy's Hospital. All students are invited to attend the opening meeting of the term on Friday, October 12th, at 5.0 p.m., in the Physics (New) Theatre. John Olford, London Staff Secretary will speak on the aims of the Movement.

PASS LIST

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.

Second Examination

September, 1951

J. H. Aust
M. D. Awty
G. P. Beresford
A. W. G. Cartwright
H. A. Hill
D. K. Hutchinson
Elizabeth A. King-Turner
E. G. Lewis
S. A. Lewis
T. Lloyd
T. F. Lougher
N. E. Malyon
H. D. O. Osmond-Smith
C. B. H. Owen
G. Pearson
F. L. Richards
A. R. Sauvarin
W. Sims
G. A. Thomas
M. F. Waboss
P. G. Willis

CONJOINT BOARD

M.R.C.S., L.R.C.P.

September, 1951

Chemistry : M. G. Smith, R. B. Johns.
Physics : M. G. Smith.

SOCIETY OF APOTHECARIES OF LONDON

Final Examination

August, 1951

Surgery

M. S. Compton
*C. H. Wilkinson

Pathology

G. E. Sharp
*C. H. Wilkinson

Medicine

M. S. Compton
*C. H. Wilkinson

Midwifery

M. S. Compton
R. D. France
E. J. Stacey
*C. H. Wilkinson

* Has completed the examination.

PAPERS BY GUY'S MEN

Allsopp, C. B. Radiation Chemistry in Relation to Radiology. *Brit. J. Radiol.*, 1951, **24**, 413.

Beach, W. V. Discussion. The Treatment of Burns in Large Numbers. *Proc. R. Soc. Med.*, 1951, **44**, 584.

Blackburn, G. Discussion on Acute Cholecystitis. *Trous. Med. Soc. Lond.*, 1951, **66**, 171.

Blackburn, G. Reticulum-Celled Sarcoma of the Rectum. *Trans. Med. Soc. Lond.*, 1951, **66**, 338.

Bradley, W. H. Discussion : Influenza, 1951. *Proc. R. Soc. Med.*, 1951, **44**, 789.

Brock, R. C. Cardiac Surgery. (Lecture delivered at the Royal College of Surgeons.) *Ann. R. Coll. Surg. Engl.*, 1951, **9**, 1.

Brock, R. C. Astley Cooper's visit to Paris in 1792. *Ann. R. Coll. Surg. Engl.*, 1951, **9**, 52.

Clarkson, Patrick. Discussion. The Treatment of Burns in Large Numbers. *Proc. R. Soc. Med.*, 1951, **44**, 594.

Doubleday, F. N. The Pharmacology of Local Anæsthetic Drugs. *J. Stomatological Society of Greece*, 1951 (May–June).

Doubleday, F. N. The History of the Dental School of Guy's Hospital. *Brit. dent. Students' Ass. J.*, 1951 (March).

Dowsett, E. B. Presidential Address. (Delivered at the Annual General Meeting of the British Dental Association, London, 1951.) *Brit. dent. J.*, 1951, **91**, 29.

Falconer, Murray A. The Surgical Treatment of Bleeding Intracranial Aneurysms. *J. Neurol., Neurosurg., Psychiat.*, 1951, **41**, 153.

Hunt, J. N. The Composition of Gastric Juice. *J. Physiol.*, 1951, **113**, 419.

Ingram, Frank L. Fibrous Dysplasia of Bone and Comparable Conditions in the Jaws. *Proc. R. Soc. Med.*, 1951, **44**, 549.

Jemson, James. Atresia of the Ascending Colon. *Lancet*, 1951, ii, 61.

Lane, Ronald E. The Patient and his Job. (Clinical Lecture, Guy's Hospital, November 9th, 1950.) *Clin. J.*, 1951, **80**, 175.

Lloyd, V. E. Syphilis of the Oral Cavity. (Based on a Lecture delivered at the Royal College of Surgeons under the auspices of the Institute of Urology, February, 1950.) *Postgrad. med. J.*, 1951, **27**, 177.

Lubran, M., and another. Potassium Deficiency in Ulcerative Colitis. *Quart. J. Med.*, 1951, **20**, 221.

Maizels, M., and another. The Permeability of Human Erythrocytes to Sodium. *J. Physiol.*, 1951, **113**, 506.

Marshall, Geoffrey. Discussion on Streptomycin. *Trans. Med Soc Lond.*, 1951, **66**, 21.

Mitman, M. Discussion : Influenza. *Proc. R. Soc. Med.*, 1951, **44**, 800.

Payne, W. W., and another. Nephrotic Oedema Treated with an Ion-exchange Resin. *Lancet*, 1951, ii, 101.

Robin, I. G. Discussion on Deafness *Trans. Med. Soc. Lond.*, 1951, **66**, 242.

Robson, J. M. Local Action of Steroids on Secondary Sex Organs of Male Rats. *J. Physiol.*, 1951, **113**, 537.

Rushton, M. A. Osteoid-osteoma of the Mandibular Alveolus. *Oral Surg., Oral Med. and Oral Path.*, 1951, **4**, 86.

Simpson, Keith. Suicide, Accident or Murder ? *Brit. med J.*, 1951, ii, 661

Smith, R E. Discussion. Influenza. *Proc. R. Soc. Med.*, 1951, **44**, 801.

Stafford-Clark, D., and others. The Clinical Significance of Fasciculations in Voluntary Muscle. *Brit. med. J.*, 1951, ii, 209.

Thomson, L. C., and another. The Variations of Hue Discrimination with Change of Luminance Level. *J. Physiol.*, 1951, **114**, 98.

Warren, M. D. Medicine in 1769. *Med. Illus.*, 1951, **5**, 358.

FILM SHOW

On Thursday, 18th October, at 5.30 p.m., in the Anatomy Theatre, by kind permission of the Medical School, the following films will be shown and appraised :—

Examination of the Cervical Lymph Nodes.
(Westminster Hosp. Photographic Dept.)
A Case of Cerebellar Ataxia.
(St. Mary's Hospital Photographic Dept.)
Foxgloves in Medicine.
(Wellcome Film Unit.)
Tropical Sprue.
(Wellcome Film Unit.)

The meeting is one of a group arranged by the Scientific Film Association Medical Committee to bring new films to the notice of teachers. All teachers of medicine and nursing will be welcome and also students.

CHANGES OF ADDRESS

D. H. Forsdick, M.B., B.S., Flat 3, 3, The Paragon, Blackheath, London, S.E. Tel. : Lee Green 7605.

R. J. G. Grewcock, L.D.S., R.C.S., 27, Harley Street, London, W.1. Tel.: Langham 1833.

H. J. Henderson, M.C., M.B., B.S., (Retired), 12, The Byeway, Little Common, Bexhill-on-Sea, Sussex. Tel. : Cooden 738.

A. Martin Huntley, M.R.C.S., L.R.C.P., Westbrook House, 134, Bath Road, Hounslow, Middlesex. Tel. : Hounslow 9484.

A. F. Rushforth, M.B., F.R.C.S., 140, Harley Street, London, W.1, and 244, Baldwins Lane, Croxley Green, near Rickmansworth, Herts. Tels. : Welbeck 1933 and Rickmansworth 4868.

W. A. Vale, B.D.S., Yarrow, 24, Station Road, Orpington, Kent.

J. A. S. Wright, A.F.C., F.D.S., 27, Harley Street, London, W.1. Tel. : Langham 1833.

BIRTHS

GRAHAM.—On September 18th, 1951, at Nuffield House, to Alison (née Brydone), wife of Alexander J. P. Graham, F.R.C.S.—a daughter (Yvonne Mary).

KESSON.—On September 25th, 1951, at Queen Charlotte's Maternity Hospital, to Rosemary (née Graham), wife of Cyril W. Kesson, M.D., M.R.C.P.—a daughter.

TURNER.—On September 23rd, 1951, at Shrewsbury, to Muriel (née Cox), wife of F. R. Turner—a son.

MARRIAGES

BARKER—KNOX.—On August 29th, 1951, at Hampton Parish Church, William Hawksworth Barker, M.B., B.Ch., to Jean Valerie Knox, M.D., Dip.Bact., daughter of Professor and Mrs. R. S. Knox of Toronto, Canada.

EMSLIE—DENNIS.—On August 18th, 1951, at the First Presbyterian Church, Paris, Illinois, U.S.A., Ronald Douglas Emslie, B.D.S., F.D.S., M.Sc., to Dorothy Dennis, O.T.R.

O'REILLY—ROBERTSON.—On July 28th, 1951, at St. James', Spanish Place, Michael Philip O'Reilly, L.D.S., R.C.S., to Eileen Audrey Robertson, S.R.N.

DEATHS

McEVEDY.—On September 21st, 1951, Peter George McEvedy, F.R.C.S., of Rangemore, Knutsford, Cheshire, aged 61 years.

RUZZAK.—On September 29th, 1951, Shaik Abdur Ruzzak, retired Lt.-Col. I.M.S., of 59, Blacklands Road, London, S.E.6, aged 77 years.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1650 20*th October* 1951 *One Shilling*

PASSIM

HIPPOCRATES, so the somewhat more sceptical have commented, laid so much stress on diet simply because he had no other effective therapeutic measures at his disposal. Whether or not this is true, the succeeding centuries have seen the employment of so many drugs and manœuvres—a few of them potent but many of them quite worthless, that few of the practising physicians today can assume any authority on the subject of nutrition and, less still, give anything like sound and well-tried advice on the feeding of their patients.

Ever since hospitals were established sincere efforts have been directed by those in charge to ensure that the patients were provided with suitable meals. In 1843, in fact, the managers of the Edinburgh Royal Infirmary were of the considered opinion " that the Dietetic treatment of a very large proportion of the multifarious cases of Disease in the Hospital may be appropriately regulated without the necessity (of physicians) prescribing any extra articles of food."

Precisely a hundred years later, however, a notable Report was published by the King Edward's Hospital Fund for London, from which it was clear that in a number of instances there were certain faults in hospital dietary planning.

At the end of the First World War, hospital dietitions were unknown in this country, " though these disturbing women were rapidly appearing in American hospitals." Even in those years, great belief was still placed in the administration to seriously ill patients of the most Gargantuan concoctions by way of the rectum ! By 1926, however, Miss Pybus of the Edinburgh Royal and the late Miss Simmonds of the London Hospital, having visited America under Rockefeller awards, had established themselves in this country. Their work as pioneer dietitions coincidentally received an added impetus from the advent of such measures as the insulin treatment of diabetes and the use of liver in pernicious anæmia.

To find other people suitably trained to take up similar posts throughout Great Britain was no easy matter. Progress was nevertheless made, albeit slowly, and in early 1948 the first dietition was formally appointed at Guy's. To begin with, she worked alone in one corner of the Hospital kitchen, yet not, we hope, " as the voice of one crying in the wilderness." Since that time the department has increased its scope. Three qualified dietitions are now on the staff, assisted by a team of specially trained cooks. A properly equipped diet kitchen has been created at the north end of Hunt's house, over what was previously the Sisters' Dining Room. Facilities, at present, are far from perfect, or even completely adequate. The new department is nevertheless entirely responsible for the provision of meals direct to all patients in the wards for whom special diets have been prescribed by the medical staff. In addition, they give advice each month to some two-hundred people referred from out-patient clinics. They are available, finally, for consultation about the Hospital catering generally.

" God may send a man good meat, but the devil may send an evil cook to destroy it," said Andrew Boorde many centuries ago. And any of those poor unfortunates who, in the past, have been confined to a " non-roughage " diet know just how unappetising the meals can be. In this respect, as well as in many others, the dietitions at Guy's have exercised a most advantageous influence. Their capacity for advising out-patients on the practical aspects of food preparation and, even, of enlightening some house-officers on the scientific principles, has been well-nigh invaluable. In short, their advent has been most welcome.

The Organisation and Activities of a Department of Surgery

By LOYAL DAVIS, M.D., F.A.C.S.

Chairman of the Department of Surgery, Northwestern University, Chicago

A Lecture delivered in Guy's Hospital Medical School, on 12th October, 1951

IT is a great pleasure and an honour to meet with you in this famous and venerable institution. Often, it is difficult to choose the exact title to express that which is to be written or spoken. In this instance, however, I have been plagued by the fear that you might think me presumptuous to speak of the workings of the Department of Surgery in my University. My excuses for so doing are that an exchange of observations upon methods, and a statement of aims and principles, leads to better understanding and is of mutual benefit. Then, too often, young men in our profession do not have the opportunity for travel. This is denied until a point in life when their tissues become somewhat rigid and their experiences serve only to reinforce their fixed beliefs. Finally, I have dared to hope that an exchange arrangement between our young men in their surgical training might be effected. You can readily realise, then, that I hastened to accept Mr. Atkins' kind invitation.

HISTORICAL

Northwestern University is celebrating its centennial and, in my country, that is evidence of permanence. The Medical School, first known as the Chicago Medical College, was founded in 1859 and became a part of the University in 1869. Its founders were men of determined views ; we would call them " freebooters," and the characteristics with which they endowed that school have persisted to this day. They belonged to the faculty of Rush Medical College in Chicago, and its curriculum consisted of a series of lectures which were repeated the second year. Attendance upon the second year of lectures constituted a reason to grant a diploma *cum laude*. The fees from the students were divided among the teachers, a practice which was also common in this country. I do not speak disparagingly of this practice because I believe that the motivating influence was not the income which these men received, but their strong desire to teach. At any rate, our founders broke away, advocating a revolutionary educational change, a graded curriculum of studies. So, the Chicago Medical College, soon after to become affiliated with Northwestern University, was the first medical school in the United States which had a graded curriculum and in which students advanced to the succeeding year by the process of examination.

VOLUNTARY TEACHING

This desire of practising doctors to teach medical students has persisted, so that the clinical faculty of our medical school has received no remuneration for teaching. Until the last three years, the clinical faculty has been completely a voluntary teaching group. In a way, this has been an anomalous situation. The disadvantage of having a rather large number of teachers, so that the demands upon any one individual would not be too great, and the further difficulty of assembling a group of teachers of equally high pedagogic ability has been offset by the enthusiasm and spirit which such men showed toward their teaching duties. It has been balanced also by the preceptorial relationship which has developed between teachers, who actually practise the art of surgery, and their students. Recently, steps have been taken to compensate young men in the department in key teaching positions for their services, not, however, on a full-time basis. I believe this to be a sound organisational change.

Stated in another way, my seven predecessors as Chairmen of the Department of Surgery and I have served our University and Medical School, devoting a large share of our time to teaching and departmental activities, without financial remuneration. I need only mention the names of Andrews, Murphy and Kanavel to point out that I have been in distinguished company.

As I read the terms of Thomas Guy's will which established this hospital and the circumstances which led to the development of its medical school, I was impressed by the contrast in the chronology of events as compared to the founding of our medical school and its affiliated hospitals, which in each instance followed in that order. There is a similarity, however, in the disagreement between hospitals which apparently occur and remit, no doubt dependent upon the individualities of their attending staffs, but also, in a large measure, due to the inadequacies of the relations between the medical and administrative staffs and to the lack of understanding of medical problems by the lay Board of Governors. At least, so it is in our country but, fortunately, not in my own hospital.

HOSPITAL FACILITIES

There are three hospitals closely affiliated with Northwestern University's Medical School, but the University does not own and operate its own hospital. The staffs of these hospitals consist of members of the faculty of the medical school and dismissal actions may originate within the faculty of the school, or the staff of the hospital, and are reviewed by the other party. The course of such action is closely controlled so that injustices may not occur. At each hospital, the chief of the surgical staff is a member of the school faculty with full professorial rank. He is responsible to the Chairman of the Department for the quality of surgery performed, the training of young surgeons, and the teaching of the undergraduate medical student. The curriculum of undergraduate and graduate teaching is a uniform one in each of these three hospitals. The Chairman of the Department influences, but does not directly make, appointments to the hospital staffs in surgery. He does, however, make appointments to his surgical faculty and, as I have said, this is necessary for a hospital staff post.

Beginning, as you did, with hospital facilities, the practice of the principle of bedside teaching has been in effect far longer than with us. We have continued to strive for additions to the number of teaching surgical beds in these affiliated hospitals which are essentially hospitals for the care of private and part-pay patients. These beds are obtained by appeals to the public for financial support on the part of the women's and men's governing boards. These efforts have been progressively successful in the past but, with the advent of higher tax rates, the sources of such funds have become more and more scarce. Not one of the three closely affiliated hospitals receives money from federal, state or local government agencies.

To aid in our teaching efforts, the medical school makes use of the public wards of the 4,000 bed County Hospital and two other privately endowed hospitals which have no affiliation, such as I have described, with the University. The facilities of these hospitals are utilised through the offices of members of the faculty who hold staff appointments therein.

You may properly ask, how is enough teaching material made available to your students ? The answer is that private, part-pay and completely non-pay patients are utilised and no distinction is made in the scope of the teaching and no objections develop from the full and part-pay patients.

ORGANISATION OF TEACHING

The medical students at Northwestern University number about 125 in each of the four classes. The requirements for admission are a minimum of three years of a college education, during which certain prescribed subjects must be taken. The scholastic standing of the applicants and a personal interview, plus an aptitude test given by a college board of examiners, are considered carefully by a committee of the faculty and the Dean. Each student pays a tuition fee of $800 per year, which falls approximately $1,000 per year short of the actual cost of his education. The first two years of the medical school curriculum is concerned with work in the basic sciences and the last two years with clinical studies.

The curriculum of the Department of Surgery has as its basic objective the aim to teach the undergraduate medical student that surgery is the art of the application of the knowledge he has gained in the basic sciences to the problems of the patient. This may sound trite but, in our experience, the difficulty of keeping the student from making a sudden transition from a careful and meticulous student of scientific facts to an individual who carries a stethoscope dangling conspicuously from his pocket, with a cherubic facial expression which reflects his hope that further medical knowledge will transfer from the patient to his mind like a cloak from Heaven, is a serious one indeed.

So, in the first year of his studies, the Department of Surgery holds a class for two hours once a week in which the student is taught to observe and interpret facts about patients illustrative of, and correlated with, his week by week dissections in the anatomical laboratory, his experiments in physiology and his introduction into the other basic science subjects. He is asked to present his views to his fellow students, because our average medical student is not blessed with the gift of expression, as you are, nor does he acquire this talent during his elementary education. In a simple way, he is taught to apply the facts he has learned in the laboratories to the living patient.

In the third year, the class is divided into five units, each of which is assigned to three of the five teaching hospitals for a period of eleven weeks each. Thus, a group of about 25 students receives all of the teaching from each of the clinical departments in one hospital for one-quarter of the curricular year. Specifically, in surgery two hours a week are devoted to a seminar, or conference session, between teacher and students and eight hours a week are occupied by the student in a diagnostic workup of patients and a presentation of the patient to his fellows and instructors.

Our students have a holiday period between the first and second and between the second and third years, but then proceed without interruption into the fourth and interne years. The last year in the medical school is occupied with eleven weeks' work in the hospital as a clinical clerk in surgery and the same length of time in medicine. A third eleven weeks is devoted to the care of out-patients in a clinic of the medical school, from which patients may be sent to hospital and returned following their discharge. A fourth quarter is divided into a five-week clerkship in a children's hospital, and two weeks in an obstetric service which takes care of the patient in the home. The remaining four-week period is divided into two-week clerkships offered in psychiatry, radiology, bone and joint surgery, neurological surgery and other specialties, any two of which may be elected by the student.

During the third year, written and oral examinations are given to the students by the faculty of each teaching hospital. In addition, the Chairman of the Department of Surgery gives a personal interview and examination to each junior student.

At the end of the four years, the student is granted the Doctor of Medicine degree. For twenty years this was withheld until the student had satisfactorily completed one year's work in a hospital as an interne. State laws of licensure all now require this qualification and consequently, the University has withdrawn from an area in which it had completed its influence.

Each student may choose the hospital in which he wishes to serve his interneship and these vary from a period of twelve months divided between medicine, surgery and the specialty services ; twelve months spent only in surgery or medicine; and, in some instances, a twenty-four month period of interneship designed primarily for those students who wish to engage in general practice and have decided against any type of specialisation.

The majority of Northwestern University medical graduates, I should say, engage in the general practice of medicine in the smaller communities of the United States and consequently, our teaching methods are practical and designed to meet their requirements. In surgery, no attempt is made to teach beyond the principles of surgery. No courses are given in surgical technique ; surgical procedures in the out-patient department are prohibited ; there are no minor surgical operations.

The Training of Surgeons

Those students who are interested in becoming trained as surgeons enter a residency training programme after completion of a twelve months general interneship. This training is received in one of the affiliated hospitals, under the immediate preceptorial guidance of the Departmental deputy, or under similar circumstances at one of the three less closely joined hospitals. It is a progressive programme of responsibility in the care of patients and the teaching of students. One year is devoted to an experimental or clinical investigative problem under guidance. The training period lasts for five years, at the end of which the candidate is qualified to take the examination of the specialty board of certification for which he has been prepared. From this group of young surgeons, we encourage a chosen number to begin their practice in Chicago and join the surgical faculty. This, of course, is a hard and long period of financial sacrifice in a large city of fierce competition. There are, of course, other sacrifices involved which are acceptable to only a few who believe the rewards are completely satisfactory. To provide opportunities for these men is one of the greatest and most difficult responsibilities of the Chairman, but these need not all be of a financial nature. My own chief, Kanavel, regarded the men he trained preceptorially as a greater monument of his surgical life than the classic monograph upon infections of the hand. I have inherited that philosophy.

Besides providing hospital staff appointments, assuring them that in our system merit, and not seniority, is the important path of advancement, we offer the facilities of a laboratory in which they may carry on investigative work. We are firmly convinced that this is one of the methods of instilling a critical, more scientific approach into the young surgeon who, if he is not careful, may easily fall into the careless, slipshod habits demanded of him by a large practice.

The way of the experimenter is hard and the discipline strict. When the problem is completed, regardless of the time, a thesis written, and an oral examination passed, the candidate may receive an unqualified Master of Science degree from the University. The same procedure carried out under more exacting requirements, including a knowledge of two foreign languages, entitles the candidate to apply for a Doctor of Philosophy degree. Now, you and I know that patients do not seek the office of the young surgeon just because he holds advanced graduate degrees ; neither do these degrees testify to his surgical skill. However, everything considered, these are the surgeons I wish to depend upon to build the future of the Department.

Laboratory Investigations

At the moment, in the laboratory, several problems in surgery are in work. Perhaps you might be interested in knowing something of their nature and their progress to date, a method we use once a month to keep each other informed and to provide the excuse for afternoon coffee and cakes.

Portal hypertension and ascites, produced by partial occlusion of the inferior vena cava in the chest of dogs by a Goldblatt clamp, can be effectively prevented, or treated, by partial occlusion of the portal vein. It has been found by some of the young men, about whom I have spoken,* that when the caval and portal constrictions are applied at the same operation, either no ascites, or small amounts of fluid, develop in contrast to an extreme degree of ascites following caval occlusion alone. In animals with an already well-developed ascites following caval constriction, application of the portal occlusion results in very little or no reformation of fluid. If no treatment is given to dogs with ascites produced by caval occlusion, recovery occurs spontaneously, usually after four to six months. If at that time, ascitic fluid from another dog is injected intravenously, the spontaneously recovered dog redevelops ascites. In the treated animals, the intravenous injection of ascitic fluid does not result in the reformation of ascites.

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* Drs. Laufman, Craig and Furr.

Perhaps this simple approach to the problem of portal hypertension may find application in the treatment of the complications of portal hypertension, provided the latter is due to hepatic cirrhosis, or some form of partial occlusion of the hepatic portal system. In the presence of esophageal varices, the partial occlusion would be placed inferior to the splenic vein and the spleen would be removed. When this form of treatment is used for ascites only, the clamp can be placed anywhere on the portal vein. The general principle of the method is to shift the increased pressure away from the liver and encourage the development of anastomosis between the portal and caval systems at a lower level, where it will be relatively symptomless.

Within the past year in the laboratory it has been shown[1] that gelatin sponge is effective in controlling local bleeding in the presence of anticoagulant therapy. This holds true whether the bleeding defect is produced by heparin or by dicoumarol. Thus, regardless of whether the fibrinogen or prothrombin phase of coagulation is altered, local hæmostatic agents will provide a matrix for clot formation, provided the bleeding defect so produced is within therapeutic ranges.

This study is now being carried one step further to determine the efficacy of hemostatic agents in the presence of the complex bleeding defect produced by irradiation injury. Dogs are subjected to sub-lethal doses of total body irradiation and then subjected to surgery. It has been found that gelatin sponge is effective in controlling this type of bleeding even though the entire mechanism of the bleeding defect is not completely understood.

As often happens, this latter experiment has led to a broader field of investigation ; that of determining by what means animals subjected to massive irradiation can be made suitable to withstand surgery. Ordinarily, there is a high mortality in these " brittle " animals from causes as yet not altogether known. At present, animals are being treated with large doses of antibiotics. cortisone and ACTH in an attempt to have them survive surgery more readily.

The development by Dr. Jones, one of our Professors of Pharmacology, of a relatively accurate micro-method of lipid analysis which can be checked against the Shoenheimer-Sperry method of determining biliary cholesterol content, made it practical to initiate a study to determine the effect of cortisone, ACTH and adrenalectomy upon biliary cholesterol. Perhaps an explanation may be forthcoming of the effect which the adrenal cortex has on the serum cholesterol.[2]

As a result of our studies with the radioactive di-iodofluorescein dye test in the diagnosis and localisation of intracranial tumours, we thought it might be possible to detect appreciable differences in tracer studies between normal breasts and benign and malignant breast tumours.[3] The results from these studies were completely disappointing because of the heavy background radioactivity from the underlying thoracic structures. The real investigator is never discouraged, however, and so these young men will try the experiments again with a detecting tube more sensitive than the common Geiger-Mueller counter.

In a study[4] of the alpha toxin (lecithinese) of Clostridium Welchi it was found that the plasma and formed elements of the blood in dogs, as well as the capillary endothelium, were markedly damaged. The hæmorrhagic phenomenon produced is not unlike that following total body irradiation.

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[1] D rs. Laufman, Preston and Bordeau.

[2] Drs. Laufman, Bordeau, Jones and Tanturi.

[3] Drs. Goldstein, Bourdeau, Furr and Laufman.

[4] Drs. Furr, Laufman, and Bourdeau.

A method has been devised to produce a standard, reproducible amount of initial trauma to a vein in situ which is invariably followed by platelet and leucocyte deposition at the site of injury. It is now possible, perhaps, to study the factors of stasis, circulating anti-thrombins and each of several chemical constituents of the blood in the production of intravascular thrombosis.[1]

I might go on with several tangential problems, which have occurred to the minds of these young men, at the risk of boring you. The direction of interest, of course, changes with the men at work. The important thing, I believe, is to give them freedom of thought and action.

There is a certain amount of clinical investigation going on in the affiliated hospitals, much of which had its origin in the experimental laboratory, or is being carried out concomitantly. The surgical treatment of essential hypertension by the combined use of thiocyanates and sympathectomy has been studied for 17 years in the clinic and laboratory simultaneously. We believe that we have pointed out the direct depressant effect of the thiocyanates upon the adrenal cotical lipids and have explained, thereby, the good clinical results unobtainable in the high diastolic type of hypertension by sympathectomy alone.

Studies upon patients, and in animals, with the new anticoagulant, phenylindane-diane, and new types of long-acting vehicles for anticoagulants ;[2] studies on intestinal gas distension;[3] the use of radioactive gold in the treatment of certain types of cancer;[4] the development of a crystal surgical probe counter for the detection of gliomas of the brain at the operating table after the administration of radioactive di-iodofluorescein, are other trends in clinical and laboratory investigation in which we are interested at this time.

Again, may I say that this recital of the aims and activities of one Department of Surgery in a midwestern university of the United States was aimed at the younger men in training at this distinguished hospital and medical school. I hope sincerely that co-operatively we may find a way to exchange viewpoints, ideals, background and participation in training programmes on the level, that I believe, is so important ; that is, between the young men in medicine and surgery who are beginning their careers in our great profession. I believe it would be feasible to provide the necessary financial base for at least one man, in the beginning, to spend a year in the teaching hospital of the University with which I am associated, or a year pursuing a problem in our surgical laboratory. It is by such means, I am sure, that friendships are established which lead to permanent understandings between our countries.

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[1] Drs. Furr and Ross.
[2] Dr. Preston.
[3] Drs. Maddock and Tsai.
[4] Dr. Clarke.

STUDENTS' UNION DANCE

The Students' Union is arranging a dance on the evening of the 25th October, 1951.

It has been customary, in the past, to invite members of other colleges to attend these dances, but on this occasion advertisement is limited within the Hospital.

The Students' Union therefore cordially invites the nursing staff, physiotherapists, radiographers and members of the administrative staff to come along and help to make the evening a success.

Details will be posted shortly.

NURSES' PRIZE DAY—ADDENDUM

Guy's Final Examination. 2nd Prize : J. M. Clarkson.

TENNIS PROWESS

Congratulations to the Lawn Tennis team for regaining the Inter-Hospitals' Cup for Guy's this season. (Report—Page 393.)

Memories of Guy's

By A. R. THOMPSON, Ch.M., F.R.C.S.

Consulting Urologist, Guy's Hospital

II. THE PHYSICIANS AT GUY'S HOSPITAL IN 1898

(*Continued*)

IN April, 1899, I became a ward-clerk to Dr. Pye-Smith, then senior physician to the Hospital. He had been elected a Fellow of the Royal Society whilst still on the staff. Although he had previously lectured on physiology and, by 1899, had a good consultant practice in London, Pye-Smith was never of the scientific calibre of Wilks and Pavy, the other two Guy's physicians of the Royal Society at that time. I learnt two things from him. " If an adult," he once said, " is affected with diarrhœa and vomiting, however severe an epidemic of enteritis may be, always think of arsenical poisoning." Again, " The common things occur commonly," a very useful piece of advice when a man is trying to get through his work in the out-patient department as expeditiously as possible.

There is a story about Jacobson and Pye-Smith. For reasons already indicated, the two men did not get on very well with each other. Jacobson, called in on one occasion by Pye-Smith to consult about some case in which the gall-bladder might be involved, saw the case independently. He wrote on the back of the bed-letter a few words, the gist of which was that anybody but a fool or a physician would have thought that the case was one of gall-stones—and then signed his name. Now Jacobson's signature was quite a characteristic one, but the letters were very large, and the " b " in his name was written with a capital " B ", which complicated matters. When Pye-Smith saw the remarks, he read them out quite imperturbably to the ward-clerks and, at the end of the notes, came across Jacobson's signature. Pye-Smith hesitated for just a single second, and then said, referring to this signature, " Mr. Jacobson has been kind enough to append a diagram, perhaps someone will be kind enough to explain it ! "

It is recorded that Perry, " facile princeps " in the proper display of specimens found in the post-mortem room, was doing an autopsy on a woman patient who had been under the care of Pye-Smith. The case was one of acute peritonitis of unknown origin, unknown and apparently undiscoverable. Perry had nearly finished the examination when the physician and his clerks entered the room. Pye-Smith asked Perry if he had pushed a probe along the Fallopian tube. " No, Dr. Smith, I have not. Have you ever tried to do so ? " was the snappy answer of Perry, a discomfiting remark which left the physician no option but to leave the room as quietly as possible.

Pye-Smith was always smartly dressed, and wore an immaculate top hat and frock coat. He had a white beard and was a striking-looking man. His nephew, Charles Pye-Smith, was at the Hospital as a fellow student of mine. Subsequently he was house-surgeon to Lucas and later settled in Huddersfield, where the size of his practice was truly immense. To him I am particularly indebted for looking after me when I was ill.

Sir Frederick Taylor comes back to me with very great distinctness. I did the appointment of " clinical " with him and Perry as chiefs. I learnt several things from Taylor, who was better with seniors than with juniors for actual teaching. He liked exact statements to be made and disliked very much things being standardised in terms of things which were not measured, e.g., the size of a marble, the shape of a bean, and so on. In connection with this I recollect very well how annoyed he was, on one occasion, with a post-mortem examiner who had not made careful measurements how far a liver came below the costal margin in situ, and had not made measurements of this organ when it had been removed from the body. I have often thought that a comparison of the size of various swellings in living and dead people might be a suitable subject for a prize essay, or an M.D. thesis. Taylor did not think much of the restorative power of oxygen as applied in those days. " The patient," he would say, " died red with oxygen—and he died blue without it," words which may or may not be true, but with which Dr. Poulton's followers would certainly not agree. He also insisted that a pleural effusion might give rise to symptoms precisely similar to those of an empyema, and that a granulating wound of the abdomen might give rise to the same degree of pyrexia as a suppurating wound.

I became more intimately associated with him after I had become resident surgical officer. For example, I recall two successive nights in 1906 when he called me up from bed and asked me to operate upon cases of appendicitis in whom the symptoms had lasted twenty-four hours. In both cases he was right, as when I operated I found that the appendix was only just *not* perforated, I sewed up the wounds in both cases after removal of the offending organ. and both healed well. Taylor, on another occasion, asked me to do a tracheotomy on a patient who had urgent dyspnœa due to syphilitic laryngitis. I performed this operation and, as often happens, although the patient's colour improved, yet he did not breathe. Taylor urged me to do something, but I was able to reassure him by telling him that the colour had improved and that the apnœa was quite a common event. The after-history of this particular case is interesting. I suppose he was given potassium iodide, but not for long, and he was discharged. Mr. R. J. Cann told me that the patient had come to his out-patient department twenty-five years or more after the operation and that he was quite well. This case, in addition to that of the sore on the dorsum of the foot which I have mentioned under my account of some of Mr. Dunn's cases, show that there is a great deal still to be learned in connection with the treatment of syphilis—for neither of the patients took more iodide than what was needed to cure them of the local trouble.

After Taylor's retirement from a long career at Guy's I met him frequently near his house in Wimpole Street and had long talks with him there. He was even then so full of activity that he had been appointed senior physician to the Dreadnought Hospital at Greenwich. His textbook of medicine was very well-known, and was generally preferred to that of Osler, at that time its only rival. Taylor, like Davies-Colley, had played strenuous rugby football as a student. He was a striking-looking man, clean-shaven, and with a very bald head. He had a long firm stride betokening the man of action.

It was in short talks in the wards or in the street that I learnt most from Taylor. He told me that he had received a letter from an old friend of his in general practice, who told him that he had learnt the way to avoid calling in a medical consultant. Taylor, perhaps in no very pleasant or enthusiastic way, enquired of him his method. He replied that he went over every system of the body, directly he was in doubt, and found that by this method he could arrive at practically the same result as a consultant would have done. The doctor must have had a very good teacher and his views, though not doing much good financially to Taylor, must have been received, none-the-less, with pleasure.

The next in seniority to Taylor was Hale-White. I never clerked to him and it was only after I had risen to surgical registrar that I got to know him at all well. His excellent discoursing in the wards and his very clear lectures on nervous diseases made him a popular teacher. He died comparatively recently at a very great age and I shall say nothing more about him, except that I learned a great deal from him and experienced very much kindness, for which I am truly grateful.

Next to Hale-White came Pitt. Dr. Newton Pitt was a charming and well-informed man, who had been a " wrangler " at Cambridge and afterwards a fellow of Clare College. He came up to Guy's at rather a later age than most students. He always looked smart and when I saw him first at his house in Portland Place, with a letter of introduction from A. G. Barrs of Leeds, he gave me the impression of being an officer in some crack cavalry regiment. Shortly after my entry into Guy's Pitt was made a full physician, succeeding to the beds of Sir James Goodhart, and I clerked to him from April to June, 1899. Of him it may be said that no man more successfully concealed, or even camouflaged, a great first-hand knowledge of medicine and pathology under very long lists of useless papers written by foreigners than he did. Each Saturday in the summer, at 9.0 a.m., he gave a lecture on pathology. These lectures consisted in very long lists of quite valueless papers by people of whom the students had never heard, and about whom they never wished to know. Not one word of his own enormous pathological or clinical knowledge did he utter, but if a case were taken to him for his opinion, no one was more sympathetic, no one more likely to arrive at the truth of the case, and none better able to treat the patient successfully. Once Pitt was called to see a well-known student who shone, not only on the association football field, but also upon the tennis court. When Pitt saw him he diagnosed acute suppurative peritonitis and called in Lane, who did a most wonderful operation. But I have always heard that much of the success of this case was due to Pitt who, as a simple dresser, assisted at the operation most efficiently. The life of this student was thus saved, so enabling him to follow a most useful career as a well-known practitioner on the south-east coast.

It was only after I had read through twenty years of post-mortem notes at Guy's that I, in part, grasped the extent of Pitt's wide knowledge. He was particularly good in the description of congenital anatomical defects. His very real ability in this matter lay in the exact descriptions he gave of what he saw and observed. Why he should have disguised his real knowledge I cannot understand, even now. He wrote a paper on meningitis and Mr. Mollison tells me that this is still consulted by men who wish to be " in the know " about the manner in which this condition may arise from mastoid disease. He spent a very long time in the wards when he went round and frequently the students were still with him three hours after he had started. The last time that I saw him was by the Langham hotel. He was carrying a very heavy-looking kit-bag. I did not stop to speak to him, for I now know the difficulty of lifting up such a bag after one has stopped to talk in the street and has placed the bag on the pavement.

Some description of what I knew about Sir Cooper Perry may now be given for, next to Pitt, he came in order of seniority. I find it difficult to speak of him in any way adequately. I do not say that he was the man of greatest ability or original genius that I ever met, but he was certainly the greatest. A scholar of Eton, a Newcastle prizeman, senior classic in a good year, a fellow of King's College, Cambridge, an archæological traveller in Greece, he abandoned his classical interests in favour of medicine. He studied anatomy under Sir George Humphry, then professor of anatomy at Cambridge. Perry always referred to this distinguished anatomist in terms of the very greatest respect and said to me, one day, that whilst he did not know the literature well, he did know the dissections of the human body. The following story was told of Humphry. He was very keen on knowing some facts about agromegaly and was acquainted with someone having this disease. The patient died and Humphry was anxious to procure the specimen, so he called at the house and expressed regret at the death of his old friend. The relations naturally asked him to come in. He entered the house and said that, if it was permitted, he would like to see the face of the dead man, by himself if possible. This solitary sojourn with the corpse was allowed and he entered the death room. Here, in under half-an-hour, the coffin was opened, the skull removed, and Humphry was off in gladsomeness of mind, for he had secured his specimen.

After leaving Cambridge, Perry went on to the practical work at the London Hospital. Here he met Sutton, the pathologist, to whom he frequently referred when he was teaching later about the common-sense treatment of cardiac disease. Some trouble was occurring at Guy's Hospital between 1880 and 1885, and the governors and staff did not quite see eye to eye about a certain difficulty. It was decided, therefore, that the governors would fill the next vacancy on the medical side. They decided to appoint Perry to an assistant physiciancy chiefly, no doubt, because of his great ability and reputation. I have heard, though, that Gladstone wrote highly of Perry to the governors and this letter confirmed them in their belief that Perry was the man they wanted. So Perry was elected. His great ability was recognised very quickly. He had, in addition to his scholastic attainments, great powers of organisation and was always a most business-like man. He was made Dean of the Medical School and eventually Medical Superintendent. He was responsible for the building of the College at Guy's and, whatever demerits it may be thought to have now, its erection and occupation by house-officers and dressers did mark at that time a great advance in the proper corporate existence of the Hospital and its officers. After he retired from the staff, Perry continued in the Superintendent's office until a few years later. Then he was made the first principal officer and subsequently the Vice-Chancellor of the University of London. This last office he left when he was seventy-eight years old, retiring thereupon to Worthing. In that town he lived for some years and there he was seized upon to perform the important duties of the chief A.R.P. warden. He died in December, 1938.

I was his clerk when he first came on as full physician. I was his clinical assistant in the medical wards and also in the clinical wards which, at the time of which I am speaking, were situated very near the area which is now occupied by the massage block. Later as house-surgeon, as surgical registrar, and especially as resident surgical officer, I got to know Perry more intimately, but I cannot flatter myself that I was ever a very great friend of his. All I can say is that we were perfectly loyal to each other. With Perry as my teacher of medicine, there was no need for me to read any book on the subject. And whilst I contrived with some difficulty and a few failures to negotiate the examinations which were connected with surgery, I had no similar trouble with those in the field of medicine. His thoughts were clear and his teaching was sound. It was his custom to select one student from his " firm " every three months and ply him with questions throughout the whole period of his appointment. The reason of his selecting me I do not know, but for three months I was his victim. I am glad and proud to think that Richard Rowlands was selected for this rôle when he came on as Perry's clerk at a rather later period. Thus, every three months, certain students obtained very special education from the mind of the master.

Incidentally, it was Richard Rowlands who said that if the medical officer in the front surgery could not diagnose a casualty case, the diagnosis was pure guess-work on the part of the member of the staff under whose care he came in the ward. On general grounds I am inclined to agree with this view. Yet Perry, above all, had a flair for diagnosis. There was a case in John ward, the male portion of Clinical ward. How well I remember him in the corner bed on the left, just inside the door, sitting up, thoroughly exhausted and looking very pale. None of the clinicals had any idea what was the matter with him. Perry, after making a rapid examination of the chest, diagnosed lobar pneumonia in the internal part of the base of the right lung, which had not yet reached the surface. He told the clinicals that he had seem a case of sudden death from lobar pneumonia in a man, whilst walking across London Bridge.

In addition to the general medical beds under his charge, Perry also occupied the position of physician in the skin department. He was very accurate in his diagnosis of the lesions that were seen there and students, up for their finals, used to go and listen to him for an hour or so. I recollect Pitt and Perry having a constructive argument over a case of empyema. One of them took the view that empyema might commence as a simple pleural effusion ; the other denied this possibility. I must confess that the former opinion coincided with my own views, both in those days and later.

Cases of cardiac disease were well demonstrated by Perry. As a student at the London Hospital he had fallen under the influence of H. G. Sutton, a physician there, who had antedated even Sir James Mackenzie in the commonsense appreciation of the real dangers of heart disease. As long as the muscular action of the heart was able to compensate for any disease of the valves, they maintained, there was no great danger to the patient. Cases of acute pancreatitis were beginning to attract attention at the beginning of this century, as well as the very difficult condition known then as pneumococcal peritonitis. There were one or two examples of these lesions in Clinical when I was an assistant in that ward. There was also one case of acute yellow atrophy of the liver.

But, gifted as was Perry as a clinical physician, it was, above all, as an organiser, as a designer, and as one who finished any work that he had begun, that he became really great. He instituted and built the Dental School which, at once, became a success and, continuing as such, it is now regarded as one of the chief ornaments of Guy's in an academic sense. He started the Massage School and Department, which is admitted to be one of the best in Great Britain. He saw the end of the old Anatomical Department and the Baby's ward and, although the College, as a building, is of no great excellence, yet Perry must be given the credit for first thinking of the residential and social possibilities which it alone could afford. He also had the new Medical School and Library built, to be succeeded in these times by their extension into the Bacteriological and other departments. He had the new Front Surgery and

Out-Patient rooms created, and although I do not like the multitudes of small rooms, wherein the patients may get lost—for " out of sight, out of mind " is very true of such rooms—yet in another way they may be said to add to the amenities of out-patient consultation, especially so far as women patients are concerned. On the whole it may be said that Perry built well and truly. As Superintendent, he rarely attended the meetings of the medical committees, but when he did so it was generally considered that there was something of importance to come under discussion. He was very largely responsible for the formation of the necessary constitution of the Medical School and was one of its governors for some years after its constitution had been accomplished. He was a most sympathetic man and his thought for the unmarried mother was shown by the former Laundry Department and cottage at Honor Oak Park. Sympathy was at the bottom of all his work ; efficiency, energy and ability completed it. An " angel man," one old patient of mine described him. Not at all a ready speaker, and somewhat cynical at times, one always felt that, when he did make a speech, he was translating from copious Latin notes. On a bitterly cold day that ushered in a snowstorm a week before Christmas, 1938, I was watching a football match between two junior teams of Guy's and Richmond. As I had some connection with both clubs far back in the century I was in rather a quandary as to which I should support. I decided in favour of Guy's and I am glad to say, " We won." It was the day that Perry died and, I reflected, it was he that had taught me how to act on such an occasion of divided affection. He, in fact, would refuse to attend dinners of Cambridge students, saying that he could scarcely do so as a London University man. His life, indeed, was full of usefulness, but he never got any financial reward for his great efforts and achievements.

After Perry came Lauriston Shaw. These two men were very great friends and did a good deal of work together on the stomach and its diseases. At one time, Shaw was followed by a large number of students, who liked his punctuality and methods of teaching and particularly the way in which he put the elements of medicine quickly and clearly before them. In consultation, Shaw always liked the doctor in private charge of the case to be present but, though he had much to do personally with the introduction of the panel system and its acceptance by the profession, he did not appear to realise that the practitioner, in so doing, very rarely made anything financially out of such a meeting. He published a few papers and, I fancy, knew a good deal more about medicine than he cared to admit. I remember one case of his, a patient with nephritis under the care of Dr. Fawcett in the last year of the first great war. Fawcett called Shaw into consultation and, after the two had examined and discussed the case, they came back to the patient and told him that, if only he would take care of himself, he would get well. The patient did get well and is alive at the present time, writing these very words. On occasion, very hard things were said of Shaw, but he was well able to take care of himself and, in the field of verbal contention, was quite capable of holding his own. When I was a student, Shaw gave excellent bottle-pathology demonstrations in the old museum, which was placed opposite to the Park entrance of the Dispensary, on the east side of what is now part of the Venereal Disease Department. How well I recall his classification of obstructive and other diseases of the bowels —" things in the wall, things inside the wall, and things outside the wall."

Next to Shaw came Washbourn. He only flits very vaguely before me. He was keen on the new subject of bacteriology, and had done good work in this direction. He presented a cup for tennis players. Tuberculosis claimed him, however, and he died before his time.

J. H. Bryant must next be noticed. He was nicknamed " Rosy " and had a good brain and enormous hands, so that when he compared the size of a tumour to that of his combined hands you might know that it was " some tumour." It was largely due to his speaking out about some of the post-mortem examinations which he made on house-surgeons' failures that the apoointment of resident surgical officer was instituted in the first place. He was a good teacher in the out-patient department and also used to give revision classes for men up for their final examinations. He had the habit of giving " tips " for the anatomical part of the paper, but as he gave most of the contents of Cunningham's two volumes of the Manual of Dissections, it was not surprising that Bryant's " tips " were occasionally successful. He taught me one most useful piece of information in connection with the treatment of abdominal obstruction possibly due to more than one cause. In tuberculous peritonitis, for instance, several bands might have formed and all of them have given rise to obstruction. The treatment consisted in the administration of opium and belladonna by mouth. It certainly acted like a charm in the only case in which I know that he gave it. I also saw a case at Westcliffe-on-Sea of tuberculous peritonitis with obstruction to whom I gave these drugs, and it certainly acted very efficiently then. (I saw the latter case when I was a demonstrator of anatomy and well remember how glad I was of the small fee that I was asked to take !) There was another case under the care of Bryant in the female part of Clinical—Miriam Ward, as it was called. The firm of clinical was a very good one, including as it did Sir Arthur Hurst and Mr. Mollison. I came into the case as I was resident surgical officer at the time. If I recollect rightly, the case was that of a woman aged about thirty, who had some pain in the region of the appendix. Bryant thought from the other symptoms that she had appendicitis and called me in to do the necessary operation. The clinicals, on the other hand, thought that the case was possibly one of pneumonia and not of appendicitis at all. I operated and found the appendix normal. The patient afterwards showed undoubted pneumonia. I can still see Bryant walking out of the Hospital in a most depressed state of mind ; I think his vanity had been wounded. Shortly after the patient had fully recovered from the wound and the disease I again saw Bryant. He was still sore in his mind about the case. I told him that it was far better for a surgeon to cut down upon a suspected appendix, than to leave such a potentially lethal disease untreated. Shortly after this he went away for his summer holiday, from which he never returned.

Bryant performed a couple of post-mortem examinations, both of which were examples of malignant disease of the kidney with the formation of a stone. The whisper of the far off years tells me that the examinations were both performed on the same day. If so, it must have been rather a rare coincidence, for such a concatination of circumstances is very unusual indeed. Bryant took a great deal of interest in the early work on the blood and its diseases, but I do not recollect that any blood investigations were ever made in the cases of suspected appendicitis that I have mentioned. Perhaps even a blood count was not done by the clinicals. Finally, Bryant was a useful rugby footballer, being a " stocky " half-back who, in those days, could give quite as much as he took. *(To be continued)*

ACADEMIC

October		
		Exhibition. Surgical Department. " Bone Tumours."
22nd	12.00.	Mr. R. E. Rix. Dental Clinical Lecture. " Variations in Incisor Relationship." Dental Theatre.
23rd	1.00.	Mr. Blackburn. Clinical Lecture. " Carcinoma of the Colon."
25th	1.00.	Mr. Massie. Clinical Lecture. " A Case for Diagnosis."
26th	1.00.	Dr. MacLean. Clinical Lecture. " Practical Aspects of Treatment with Cortisone and A.C.T.H."
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
27th	10.00.	Surgical Department. Clinico-Pathological Meeting. Clinical Theatre.
29th	1.00.	Dr. Forman. Clinical Lecture. " Alopecia " (Baldness).
30th	1.00.	Dr. Baker. Clinical Lecture. " Smoking."
November		
		Exhibition. Surgical Department. " The Maintenance of Nutrition."
1st	1.00.	Mr. Clarkson. Clinical Lecture. " The Influence of Biology and Reparative Surgery."
2nd	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
5th	1.00.	Mr. Reading. Clinical Lecture. " Carcinoma of the Larynx."

SPORT

October	
27th	Rugby 1st XV *v.* Plymouth Albion. (Plymouth.)
	Rugby "A" XV *v.* Shelford. (H.O.P.)
	Rugby Extra "A" *v.* Old Masonians. (H.O.P.)
	Rugby Wanderers XV *v*, Wasps Exrta "A". (Sudbury.)
29th	Rugby 1st XV *v.* Paignton. (Paignton.)
November	
3rd	Rugby 1st XV *v.* Old Blues. (H.O.P.)
	Rugby "A" XV *v.* Old Blues "A". (Fairlop.)
	Rugby Extra "A" *v.* Old Blues Extra "A". (H.O.P.)
	Rugby Wanderers XV *v.* U.C.H. "A". (Away.)

Reviews

Functional Localisation in the Frontal Lobes and Cerebellum. JOHN F. FULTON. Oxford, Clarendon Press. *Price* 15s.

Your reviewer wishes to express regret and to accept responsibility for the long delay in noticing this admirable book. Although true, it would be an understatement to say that the work consists of three lectures on localisation of function in the frontal lobes and a fourth on localisation in the cerebellum. For these are more than lectures ; they are discussions in essay form. This makes them all the easier to read, for Dr. Fulton, through understanding the difficulties of the learner, raises the level of discussion easily from ignorance to increasing knowledge. He seems to view himself as a student and his readers become students with him, learning as they go, so that the increasing complexities of the subject are grasped by comfortably easy stages. The exposition is not didactic, but is a review of the available evidence, excellently arranged, and of the deductions that can be drawn from it. In this way Dr. Fulton draws attention to what is not known, as well as to the large amount that is, so that the reader not only derives pleasure from learning, but comfort from realising that much that puzzles him is also a puzzle to those who are most learned. The book is thus a pleasant excursion towards the limits of present-day knowledge in a subject which, itself never dull, is much enlivened by the treatment it receives. M.P.

A Ward Pocket Book for the Nurse. By H. M. GRATION. Faber. *Price* 5s.

It comes as a great pleasure to find a new and even more complete edition of this excellent little book. Its undisputed value as a book of reference has long been universally acknowledged and the addition of the more recently introduced treatments and tests can only increase this value. Withall it remains compact and well presented. P.L.G.

Medicine in Britain. By HUGH CLEGG. 3rd Edition. Longmans. *Price* 2s.

The real purpose of this book is difficult to ascertain. This third edition furnishes a readable, accurate and up-to-date summary of the medical (and health) services of the country. The presentation, however, is somewhat banal, the style pleasant, and the content inadequate and superficial for the really discriminating reader. In fact, it reads like a travel brochure and, though it may serve as an introduction for the tourist, it is scarcely informative to the thinking English public. G.

SALE OF WORK

A sale of work is to be held in the Nurses' Home, Guy's Hospital, on Friday, November 30th, and Saturday, December 1st, 3.0—6.0 p.m., in aid of the Educational Fund, Royal College of Nursing. Gifts would be appreciated during November and members of the profession and their friends will be welcome at the sale on November 30th and December 1st. Mrs. Askew has kindly promised to open the sale on Friday at 3.0 p.m.

X-RAY MEETINGS

The weekly X-Ray meetings organised by Dr. Hills have been resumed in the Gordon Museum and they will be held, each Thursday, at 5.0 p.m.

They are informal and their object is to consider the X-ray findings of current cases actually in the process of being investigated. They appear to be an excellent opportunity for correlating the clinical findings with the X-rays, particularly if the House Officers can find time to come and show the films of their own cases. These meetings also appear to be of real value in maintaining the most intelligent use of the various special X-ray investigations and it is the hope that, as in the past, they will be attended by the House Officers and Registrars.

Correspondence

The Late Peter McEvedy

SIR,—I have read with deep appreciation your tribute to McEvedy. May I add, tentatively, one further tribute ? Unless I am confusing him with someone of the same name, he was a fine rugger player, and one of the best three-quarter line Guy's ever had, which was McEvedy, O'Brian, Allcock, and E. (Teddy) Morgan.

Yours, etc.,

Fairlight, Totteridge,
London, N.20.

B. HALLEY STEWART.

Memories of Guy's

SIR,—I have been greatly interested in the letters published in the last two issues of the *Gazette*, throwing the limelight on the " nineties " and bringing back all the memories of long ago. May I remind the writers that there is still in active existence a " Nineties " Club, the members of which dine annually at the Trocadero just for the pleasure of meeting each other once more, and indulging in reminiscences of the old days. This year there were fifteen who turned up and we had a very happy evening together. I am sure that there must still be a good many Guy's men of the " nineties " who never come, but who would be very welcome. If any such read this I hope they will get into communication with our indefatigable Secretary, Mr. Ernest Dowsett, 12, Gloucester Place, London, W.1, who would be delighted to add their names to his postal list.

Do Guy's men nowadays form period clubs for the years ahead of them ? If they do not, I think they are missing a great opportunity.

Yours, etc.,

WILLIAM T. MILTON.

29, Westmount Road,
Eltham.

SIR,—I should like to express my appreciation of the interesting articles being contributed by my friend Mr. A. R. Thompson.

Apropos of his account of the digital dilatation of the female urethra which he mentions, the writer would like to record that over twenty years ago he was cystoscoping a female bladder and found that there was a calculus almost extruded from one ureter. Having recently read an article on the distensibility of the female urethra, he used the smaller units of Hegar's uterine dilators, and inserted a pair of curved forceps into the bladder and readily grasped the stone and removed it.

The patient suffered no inconvenience and was up and about in two days.

Yours, etc.,

Cilgwyn, Old Colwyn,
Denbighshire.

A. NORMAN LEEMING.

SIR,—The " Memories of Guy's " referring to the Wainwright case has reminded me that the murder must have left a deep impression on ships' company of that era. I was outward bound from London in the fo'c'sle of a barque many years after the trial. I asked an old man, the cook (known as the Doctor), " What is this, Doctor ? " indicating a piece of " bully." He replied, " That, Crim.," (I was known as the Criminal) " is a piece of Harriet Wainwright."

Yours, etc.,

Old Farm Cottage,
Wavendon, Bletchley,
Bucks.

REGULAR READER.

CORRIGENDUM : In the letter from Dr. Larkin published in the last issue of the *Gazette* the author of " The Trial of the Wainwrights " was unfortunately printed as H. B. Tring. It should, of course, have been H. B. Irving.

Sport

RUGBY

Guy's *v.* United Services, Portsmouth

At Portsmouth. Result:—Won 9—6
6th October, 1951

For this game Guy's were without J. W. Kirkbride, J. C. Burt and W. G. Davies in the pack, and J. C. Kingston on the left wing. G. D. Thomas came into the side at outside-half. Conditions were sunny and warm with a slight breeze when Guy's won their first away game of the season. A large crowd turned out to watch a fast, even game.

Attacking in the opening minutes Guy's were awarded a penalty near the opponent's try line. W. J. Howells kicked the goal giving the Hospital an early lead. United Services equalised with a try after an excellent bout of passing in which both backs and forwards combined. The warmth of the afternoon had its effect on the standard of play which was at times decidedly scrappy. Howells kicked his second penalty goal from fully 35 yards to put Guy's ahead again. Just before half time J. Osborn was unlucky in not scoring when he lost control over the opponent's try line after gathering a high bouncing ball.

In the second half the standard of play improved and Guy's were well on the attack with D. Clark and B. Cremin much in evidence. Faulty handling by the backs prevented them from scoring. Following a scrum in the Guy's "25" the United Services' outside-half scored an unconverted try round the blind side. When it seemed that the game would end in a draw Howells capped a brilliant display by kicking his third penalty goal. United Services pressed very hard in the closing minutes but could not secure the all-important score.

Teaml: W. J. Howells ; E. O. James, J. W. Osborn, S. C. C. Scott, G. B. Middle ; G. D. Thomas, R.K. Knight ; L. M. Hillman, D. L. H. Clark, D. C. Lee C. J. Wilkinson, C. W. Pook, D. P. Honey, H. C. Meredith, B. J. Cremin.

Guy's *v.* Aberavon

At H.O.P. Result:—Lost 3—17
13th October, 1951

Aberavon brought a very good record with them on Saturday, having won eight, drawn one, and lost one, in scoring 124 points against 41. Guy's, with the pack almost at full strength, and the same backs as last week, rose to the occasion and gave the visitors a really good game.

The beginning of the first half saw attacks from both teams, and after a period of good open play, Denzil Jones put Aberavon in the lead with a try under the posts after a good run from a tight scrum. The kick failed. Soon after this Aberavon again scored with left centre O'Sullivan making an opening for Lodwig to run through and touch down in the corner. Once again the kick failed. Guy's still attacked well but unsuccessfully and at half-time Aberavon had increased their lead to nine points, with a penalty goal by full back Richards from in front of the posts, having already twice failed from similar positions.

The second half continued with good rugby and Guy's were soon rewarded with a penalty goal kicked by Howells. Aberavon soon replied with the wing forward gathering a kick ahead and running well to touch down near the posts. Richards converted with a safe kick. Play again continued very even until, shortly before no side, the visitors scored in the corner from a good three-quarter movement, O'Sullivan touching down. The kick failed.

Fly-half, G. D. Thomas, has settled down and earned his place in the team with excellent kicking and good movements. The forwards had a good day giving the backs a lot of the ball from both scrums and line-outs. The wings are still getting the ball too late and with too little room to use their speed. Aberavon, generally, showed more finish and appeared the fitter side.

Team : W. J. Howells ; E. O. James, J. W. Osborn, S. C. C. Scott, G. B. Middle ; G. D. Thomas, R. K. Knight ; J. W. Kirkbride, D. L. H. Clark, C. T. M. Wilson, J. C. Burt, C. W. Pook (Capt.), D. P. Honey, W. G. Davies, B. J. Cremin.

HOCKEY

Guy's *v.* South Saxons

At Hastings. Result:—Won 4—0

The hockey season has re-opened once again, and we are heartened by the appearance of some enthusiastic freshmen to rejuvenate our ranks ; we extend to them a very hearty welcome, and wish them every success in this and in subsequent seasons.

We arrived at the south coast and, duly invigorated by a breath of sea air, set into a fast, open game on an excellent pitch. From the start Guy's showed superiority in almost all aspects of the play, keeping up a well co-ordinated pressure on the South Saxons' goal. Hall opened the scoring with a good goal, which was followed by a series of corners given against a harrassed defence. After several determined efforts, Millar made his début with a fast shot, conveniently deflected by a defender. By dint of good marking and accurately manœuvred passes, the play was kept in the South Saxons' territory practically throughout the first half, and Hall added another goal before the change-over.

After the interval, South Saxons made good use of their wings, and on several occasions the solid Guy's defence wavered, though our goal was never seriously threatened by a sustained assault. The game was now more evenly spread and continued at high speed, with firm passing and keen marking on both sides. In another attacking spell, Linahan found Blake well placed on the edge of the circle, to put in a fine, low shot which gave the goalkeeper no chance.

Towards the end, the formation of the Guy's attack became somewhat ragged, which was not altogether surprising, in view of the fast pace of the game throughout.

The standard of play was consistently high, and all players gave a high-class performance. Any predictions at this stage of the season would be rash and unwise, but if this standard of play is maintained this season, it will need to be a good team to restrain us from regaining custody of the Hospitals' Cup.

Team : C. Bishop ; R. Park, E. A. Murray ; W. R. O. Eggington, D. Linahan, C. F. M. Robinson ; E. R. Gibbons, J. J. Hall, D. E. Blake, I. J. Millar, D. V. Duckworth.

2nd XI *v.* South Saxons

At Hastings. Result—Drawn 3—3

3rd XI *v.* Westcliff

At H.O.P. Result—Lost 3—10

LAWN TENNIS

Inter-Hospitals' Cup—Final Round

Guy's *v.* Westminster

At H.O.P. Result—Won 6—3
Saturday, October 6th, 1951

1. C. H. Opie (Capt.) & P. J. Frost (Guy's)
lost to
N R. Lewis & A. Wagstaff 6–8, 6–4, 2–6.
beat
R. Grande & D. H. Davies 6–2, 6–0. 2–1
beat
D. G. Scott & J. Anderson 6–0, 6–1.

2. E. G. Searle & J. A. Bullard
lost to
N. R. Lewis & A. Wagstaff 1–6, 1–6.
beat
R. Grande & D. H. Davies 6–3, 4–6, 6–3. 2–1
beat
D. G. Scott & J. Anderson 6–0, 8–6.

3. F. A. F. Biddle & K. E. Thomas
lost to
N. R. Lewis & A. Wagstaff 1–6, 6–3, 1–6.
beat
R. Grande & D. H. Davies 3–6, 6–3, 6–3. 2–1
beat
D. G. Scott & J. Anderson 6–1, 6–2.

Result : Won 6–3

It was on a sunny afternoon and on hard courts that this eagerly-awaited contest between the two hospitals was staged. This was the third successive year they had met in the Cup and Westminster had won on both the previous occasions. Was Guy's to be third time lucky ? Certainly, they had convincingly beaten St. Thomas's, the holders, some weeks earlier, but a Final can be such a harassing affair.

Westminster began by making a surprise move calculated to swing the match early in their favour. N. R. Lewis, the Cambridge blue and one time reserve for the Davis Cup, was partnered by A. Wagstaff their No. 2, making a formidable first pair, and demanded of their other pairs only two wins out of six in order to clinch the match. Guy's took up the challenge nobly. After the initial nerves had worn off, both teams settled down to some steady, often fast, tennis. Play on court 1 was especially good, Lewis, Opie and then Biddle excelling themselves, and many an exciting rally ended in a burst of applause from the small crowd which had gathered. At the end of the first round Guy's lead by 2 matches to 1 ; after the second by 4 to 2 ; and finally won by 6 to 3.

Although the Westminster first pair were invincible, they were well extended by our first and third pairs. Guy's, by winning all six matches against the remaining pairs, proved themselves to be the better-balanced team and emerged worthy winners.

I should, on behalf of the President and members of the L.T.C., like to thank the Matron and Nursing Staff of the Hospital for allowing the 1st VI the use of their court for practice. This was invaluable during the weeks preceding the Final and proved to be a deciding factor in the ultimate victory.

D.V.H., *Hon. Sec.*, L.T.C.

BOXING CLUB

At the Annual General Meeting of the Boxing Club held on 10th October last the following officers were elected :—

President :	Mr. A. J. McNair.
Captain :	A. H. Atkinson.
Vice-Captain :	B. J. Cremin.
Secretary :	W. H. Watson.

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Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the appointment of **Registrar in Clinical Dental Surgery** with attendance on 2 sessions per week to commence duties on **1st January, 1952.**

Salary will be at the rate of £775 per annum in the first year and the post will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **21st November, 1951.**

Applications are invited for the post of **Senior Registrar** in the **Department of Anæsthetics** commencing on **December 1st, 1951.** Applications, together with the name of one referee, should be sent to the Dean, Guy's Hospital Medical School, not later than **31st October, 1951.**

Applications are invited for the appointment of **Registrar** in the **Department of Psychological Medicine** to commence on the **1st January, 1952.** Applications, together with the name of one referee, should be sent to the Dean, Guy's Hospital Medical School, not later than the **1st November, 1951.**

PHYSIOTHERAPY BALL

Wednesday, November 14th, 1951

A Ball will be held at Bush House, Aldwych, on Wednesday, November 14th, 1951. Mr. and Mrs. Murray Falconer have kindly consented to receive the guests at 7.30 p.m. Double tickets 25*s.* may be obtained from the Physiotherapy Dept., Guy's Hospital.

PASS LIST

UNIVERSITY OF LONDON

General Second Examination for Medical Degrees

September, 1951

Bridget M. Johnson
J. McKenna
J. A. Pollock
Corinne J. Richardson

UNIVERSITY OF OXFORD

Long Vacation, 1951

General Pathology and Bacteriology

A. H. Vaughan

Forensic Medicine and Public Health

W. D. Hayley

Special and Clinical Pathology

W. D. Hayley
C. T. M. Wilson

CONJOINT BOARD

L.R.C.P., M.R.C.S.

First Examination
September, 1951

Anatomy

J. R. F. Boger
D. J. Davies
G. G. Temple

Physiology

J. R. F. Boger
J. L. Croft
G. H. Daw
Sheila F. Evans
R. J. S. Milton
Mary R. Remington
G. G. Temple

Pharmacology

F. A. F. Biddle
D. W. Breese
N. C. Brooks
J. R. Duke
P. G. Dunbar
R. H. Farrell
E. C. Howarth
Helen L. M. Partridge
J. L. Turk

JUNIOR STAFF MEETING

At a meeting of the Junior Staff on Monday, 1st October, 1951, the following were elected to serve on the Junior Staff Committee for the coming year :—

K. F. Anderson, C. J. Earl, R. Emslie, H. P. Guerrier, G. T. Hammond, J. C. Houston, R. E. Matthews, A. Nightingale, B. J. Rickard, H. A. Ripman, P. R. Rowland, L. F. W. Salmon, G. A. Thomas, D. J. Tibbs, W. J. Tulley, W. A. Vale.

The Junior Staff Committee thereafter elected :—

Chairman : J. C. Houston.
Secretary : H. A. Ripman.

and submitted to the School Meeting the names of the following four members as their representatives on the School Council :—

J. C. Houston, L. F. W. Salmon, B. J. Rickard, W. A. Vale.

CHANGES OF ADDRESS

P. W. Clarkson, M.B.E., F.R.C.S., 107, Harley Street, London, W.1, (residence and consulting). Tel. : Welbeck 2255.

A. J. Drew, F.R.C.S., 330, Birmingham Road, Walsall, Staffs. Tel. : Walsall 4185.

Surg.-Lieut. M. C. H. Jackson, R.N., H.M.S. " Falcon," R.N. Air Station, Hal Far, Malta, and 2, Ivanhoe Flats, Sir Augustur Bartolo Street, Ta'xbiex, Malta. Tel. : Sliema 1951.

T. J. Jones, M.B., B.S., Gaywood, Llandyssul, Cardiganshire. Tel. : Llandyssul 209.

J. O. Laws, M.B., B.Ch., Institut du Radium, 26, rue d'Ulm, Paris 5e, and 96, avenue de la Republique, Bondy, Seine, France.

BIRTHS

COX.—On September 27th, 1951, at Nuffield House, Guy's Hospital, to Betty (née Padbury), wife of A. G. Charlton Cox, M.D.—a son (James George).

JONES.—On September 20th, 1951, at The Maternity Unit, Carmarthen, to Phyllis (née Plett), wife of T. J. Jones, M.B., B.S.—a daughter (Rosemary Hetty).

SUNNER.—On October 7th, 1951, at Flat 3, 12a, Coley Avenue, Reading Berks., to Maureen (née England), wife of A. H. Sunner, M.C.—a daughter (Susan) a sister for Bridget.

TRUSTED.—On October 3rd, 1951, at Nuffield House, Guy's Hospital, to Jennifer, wife of H. W. Trusted, M.B., B.Ch.—a daughter (Deborah Lindi).

MARRIAGES

ALBAN-JONES — LEWYS-LLOYD. — On September 8th, 1951, at St. Mary's, Llanfaircaereinion, D. J. A. Alban-Jones, T.D., M.R.C.S., L.R.C.P., to Delyth Lewys-Lloyd, M.A.

REES—THOMAS.—On September 19th, 1951, at Llanddeiniol Parish Church, Denis David Rees, M.B., B.S., to Nana Thomas of " Benglog," Llanddeiniol, near Aberystwyth.

STOKER — FORSTER. — On September, 22nd, 1951, at St. John the Baptist Church, Yaverland, I.O.W., Dennis Stoker, M.B., B.S., to Anne Forster, S.R.N.

TWEDDLE—LUKER.—On October 6th, 1951, at St. Peter's, S. Croydon, Eric Tweddle, L.D.S., R.C.S., to Pauline Betty Luker.

DEATH

CARD.—On September 23rd, 1951, Alfred Herbert Card, M.R.C.S., L.R.C.P., of 47, Cassiobury Park Avenue, Watford, Herts.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1651 *3rd November* 1951 *One Shilling*

PASSIM

ACCORDING to the figures derived this year by Mr. P. G. Gray from the monthly Survey of Sickness, 51% of all women and 37% of all men in England and Wales wear spectacles. These staggering proportions admittedly bear no direct relationship with the number of people who really need spectacles nor, indeed, with their reasons for requiring them. It appears to us that while Mr. Gray's statistics are probably impeccable and while his classification of the numbers into the various age-groups and occupations may be pregnant with analytical deductions, they bear altogether the cold, heartless unimaginative stamp characteristic of the mathematician.

Looking around us we perceive that no two bespectacled people are the same. To begin with, there are those very obvious differences (even to those not ophthalmologically minded) of strength and appearance. In some the lenses are demonstrably thick, like the " bottle-bottom " panes of glass in the Lancashire manufactured windows of " Ye Olde Tudor Restaurant " ; in others, the lenses are bright and level, so that we see the wearer's eyes presumably as clearly as he sees ours. Then there are those exciting variations in the type of frame, from the military steel to the Tunbridge Wells " pince-nez ", from the student horned-rim to the new coloured oblique of " Vogue ". In all these diversities, we feel, there is scope not only for further factual and objective research but also for fruitful psychological enquiry as well.

In addition though, are further fascinating aspects of spectacle wearing, as distinct from mere spectacles. There are those for whom these " splints for the eyes," as Aldous Huxley has described them, have become such a part that, when accidentally caught without them, they look embarrassingly undressed. There are others, by contrast, for whom the glasses look more at home in the hands than on the face at all—they point with them, tap on the table with them, shake them warningly, wave them airily but, we suspect, seldom see with them. Related to these, of course, and in fact constituting one distinct sub-division of the category, are the " spectacle lecturers." They start at the lectern with their visual aids *on*, peer at their notes, lift their heads, murmur, " Ladies, er, Gentlemen ", and take the blessed things off. Thereafter an alternating procedure of on-and-off is maintained throughout the lecture so that, ere long, the audience is so bemused by the individual's antics that their attention is completely distracted from the subject billed for discussion. More impressive, yet paradoxically enough not so bewildering to the more serious-minded among the listeners, are the " bi-spectacled ". They are kind enough to arm themselves with two sets of lenses, one used exclusively for scrutinising their papers and the other through which they gaze benevolently at their hearers.

Minor classes come to mind as well—those whose spectacles, probably made as misfits purposely, slide down the nose to be flicked back from time to time by a deft movement of the right index finger ; those who perch them on the forehead, to look rather like ancient aviators or motor-cyclists (the frames, it will be discovered, have to be made especially for this manœuvre, for no ordinary ones will do) ; those, " Prudentially " minded, who have the ear-pieces further secured by an elastic cord encircling the occiput.

The whole business of spectacle wearing and spectacle fitting is therefore no simple matter that can be resolved into straight-forward administrative or mathematical concepts. It is, rather, a science compounded with an art, in which mechanics fuse with poetry and optics with æsthetics and so provide for studies leading, not so much to the D.Sc., as to the widest implications in the fields of philosophy.

Remember, too, that of the consultant ophthalmologists at Guy's, both men of charm, personality, poise and reputation, neither is to be seen in spectacles except on rare or otherwise unobtrusive occasions.

GUY'S HOSPITAL, 1725—1948

Edited by Hujohn A. Ripman for Guy's Hospital Gazette Committee. Designed and produced by Adprint Ltd., London. *Price* 18*s*. 6*d*.

As explained by Dr. Campbell in a preface, the *Gazette* Committee have for some time contemplated producing a short, illustrated history of Guy's Hospital and its School and have set aside a sum of money to subsidise it. The result is a beautifully produced and illustrated book at a remarkably cheap price, which every Guy's man and woman who takes pride in the wonderful heritage which is theirs will wish, and be able, to possess. Too much praise cannot be given to the reproduction of the illustrations ; the coloured plates in particular being of the very highest standard. The book is in five sections. Guy's Hospital, by the late Sir William Hale-White, concluded from 1924 by Hujohn Ripman ; the Medical School, by T. B. Johnston ; the Dental School, by F. N. Doubleday ; Nursing at Guy's, by Dorothy M. Smith ; and Guy's as it was in 1948, by the late Sir Herbert Eason. Each section is excellent in itself, but the whole suffers perhaps a little by a certain lack of balance in content and presentation. The Medical School section is mainly historical and that on the Dental School mainly biographical, while that on the Hospital is a mixture of both. Again, the section on the Dental School deals with the staff down to the present day, that on the Hospital does not mention the living, while in the case of the Medical School very little is said about its staff at all. This was no doubt inevitable, as explained in the preface, from the manner in which the book was evolved, and while maybe a pity, it does not in any way spoil the excellence of the individual articles, or make the whole less desirable or interesting. The section on the Hospital might with advantage have been longer, as there are many omissions due to lack of space. It seems odd, for instance, to find no mention of such an outstanding Guy's personality as Jacobson, and the growth and development of the special departments, which was the outstanding feature of Guy's between 1910 and 1948, receives the barest mention. Guy's during the blitz is admirably described, though no mention is made of the fact that for some forty minutes it was without patients for the one and only time in its existence. Such criticisms, however, are very minor, and for the whole there can be nothing but praise. The *Gazette* Committee and Mr. Hujohn Ripman have earned the gratitude and thanks of all who love Guy's for conceiving and producing this book, and the authors of the several articles which make it up are to be congratulated on the care and skill which they have devoted to their task. The design and production by Adprint Ltd. is of the highest possible standard, and it is with complete confidence that they will be more than satisfied with their bargain that we advise all Guy's men and women to *Buy This Book.*

E.G.S.

CHRISTMAS CARDS

Christmas Cards are on sale in the *Gazette* Office, 6, St. Thomas' St., S.E.1. Prices : 6*s*. and 5*s*. 6*d*. per dozen, including envelopes (per post 6*d*. extra), single cards (without envelopes) 2*s*. 6*d*. per dozen (post 6*d*. extra). Early purchase is advised to avoid disappointment.

The Rôle of Cobalt and Copper in Nutrition

By G. L. MONEY

Being the essay for which the author was awarded the Sanderson-Wells (Junior) Prize of the University of London, 1951.

HISTORY

KNOWLEDGE of the nutritional rôle of copper, cobalt and other trace elements is still in its infancy. As in other fields of biological thought, progress is in the direction of the infinitely small and it is not surprising that attention has shifted from the more bulky components of our food. This is due to the rapid growth of chemistry and its subsequent happy wedlock to biology. Today the body is no longer a complex machine for the turnover of proteins, fats, carbohydrates and water. The vitamins and the trace elements have come in, to elucidate the newly-opened field of enzymology.

Work in the plant kingdom preceded that on animals. Woodward (1669), Julius Sachs and Knop (1860), developed the technique of water culture, and by the time that Pfeffer and Bertrand (1897) had finished their work it was clear that nitrogen, sulphur, phosphorus, potassium, calcium, magnesium, iron, sodium, chlorine and manganese were essential for the healthy growth of plants. Zinc, aluminium, boron and silicon have since been added to the list, and copper received recognition following the work of Summer (1931), Lipmann and MacKinney (1931), Andersson (1932), Osserkowsky and Thomas (1933). The addition of small quantities of copper induced considerable increase in the growth of sunflowers, flax and tomatoes ; in the absence of copper, flax and barley grown in water culture failed to produce seed ; " chlorosis " and " reclamation disease " are susceptible to copper therapy. In 1939 Arnon and Scott put molybdenum into the picture.

Lower down in the plant kingdom similar results have accrued. Intensive work on the fungus *Aspergillus niger* has shown that it definitely requires zinc, manganese, copper, molybdenum and gallium. Indeed, Raulin—a contemporary of Pasteur (1869) living before his age—made detailed studies to establish the essentiality of zinc for *A. niger*. More recent work includes that of Hopkins (1930), who showed manganese to be essential for the unicellular green alga *Chlorella*, and also Harvey (1939) who showed the diatom *Ditylum brightwelli* to be similar.

Turning to the animal kingdom, calcium, phosphorus, sodium and chlorine can scarcely be labelled " trace " elements. Their presence in bone and body fluids was known to classical medicine and physiology. The discovery by Menghini (1747) of iron in blood was outstanding for a worker who lived before the Industrial Revolution. For a long time afterwards, progress was slow, since these " metals " were looked upon with suspicion in biological material. Iodine was first used for goitre (1820) less than ten years after the chemical discovery of the element itself, though the essential pathology of this condition remained obscure until established by Maine and Williams (1908).

Copper has been known as a constituent of the blood of snails since Harless's (1847) classical studies. Turacin, the brightly-coloured pigment of the Turaco bird's feathers, was reported as copper-containing by Church (1869), but the modern concept of copper in blood formation began only in 1925 with the well-known researches of Hart, Elvehjem, and others. *Enzootic ataxia* has also recently been traced to copper deficiency in the soil of affected areas. The story of copper is probably not yet complete, for it has also been demonstrated as part of the prosthetic group in certain enzymes.

Cobalt, the " youngest " of the trace elements, did not come under notice until Waltner and Waltner in 1929 demonstrated " cobalt polycythæmia " in laboratory animals. In the following decade, *Bush Disease* or *Enzootic marasmus* became revealed as a cobalt-deficiency disease. But the most fascinating aspect of this story was the sudden discovery of cobalt in Vitamin B_{12} (Lester Smith, 1948), a component of liver extracts used in the treatment of pernicious anæmia for nearly twenty years.

The scope of trace-element physiology has widened with the development of micro-chemical methods but the horizon, now misty, remains to be explored.

Nutritional Requirements

In addition to energy-yielding and body-building foods, other substances have to be considered in answering the question, " What is a complete diet ? " The vitamins and trace elements have all come into the picture so recently that their precise rôle is still to be elucidated. It seems, nevertheless, certain that trace elements exert their effect by entering into the composition of important physiological compounds and so take part in catalytic mechanisms in the body.

Since the occurrence of copper and cobalt in the body is not fortuitous it is relevant to consider both the food sources and the quantitative requirements. This is extremely difficult, for particular accuracy is demanded of the techniques used in the estimation of micro-nutrient substances. The early work of Lindow, Elvehjem and Peterson (1929) indicated that less than 1 mg. per kg. fresh material of the following substances consist of copper :—

Apples, beet, greens, cabbage, cantaloupe, carrots, celery, sweet corn, cranberries, cucumbers, gooseberries, grapes, grapefruit, lemons, lettuce, musk melon, onions, oranges, pineapple, pumpkin, rhubarb, strawberries, tangerines, tomatoes, turnips, water cress and water melon.

Copper-rich foods are calf-liver, brazil-nuts, butternuts, chocolate, cocoa, molasses, mushrooms, oysters, pecans, walnuts, wheat bran and wheat germ. There are wide variations in the copper content of many foods, more so since the widespread use of copper-containing sprays adds much of the element to a number of plant products.

According to McCance and Widdowson (1946) the copper content of the main dietary sources are (mg. Cu./100g.) :—

Liver	5·8	Cereals	0·03—0·65
Cocoa	3·40	Dairy Products	0·02—0·36
Legumes	0·49—1·22	Meat	0·09—0·27
Kidney	0·31	Vegetables (non-leguminous)	0·07—0·15
Nuts	0·14—1·10	Fruits	0·05—0·25

In the human body, the copper-rich organs are the liver, kidney, heart, brain and hair ; copper-poor regions are the skin, lung, pancreas, spleen, skeletal muscle. The ordinary mixed diet provides 0·1–5·0 mg. copper per day (McCollum : " The Newer Knowledge of Nutrition "), but it is difficult to assess normal requirements. Daniels and Wright (1934) suggest that the diet of children of pre-school age should not contain less than 0·1 mg. copper/kg. body weight per day. Laverton and Binkley (1944) suggest that adults need 2 mg. copper daily. If human beings ever suffer from copper deficiency special attention should be paid to pregnant women with the exacting copper demands of the fœtus. Excess of copper is poisonous, but it is reassuring to know that in farm animals there is a wide margin between the therapeutic dose and the toxic level.

No evidence of cobalt shortage has been shown in the human diet. 0·1 mg. per day was enough for experimental work in farm animals, and the figure of 1 mg. per day is recognised for a cow. Cobalt, undoubtedly, is essential for man, but how much remains uncertain. Probably less than 1 mg. daily would suffice for normal subjects, since patients with pernicious anæmia require no more than 10μg. daily (vide infra.).

Earlier workers found considerable difficulty in estimating the traces of cobalt that occur in foods and other biological material. Elvehjem and Stare (1933) found less than 0·01 mg. cobalt in 100 gm. milk. Blumberg and Rask (1933) made spectrographic analyses of the ash of milk and could not detect cobalt lines in the spectrograms. Stare and Elvehjem found less than 0·01 mg. cobalt in the entire body of rats reared on milk and supplements of iron, copper and manganese. This probably accounts for the scarcity of reliable data even now.

Physiology of Cobalt

There is no evidence yet for a serious consideration of cobalt in human dietetics. The requirements of this metal are so small that its deficiency *per se* is not yet a recognised clinical entity. From the physiological standpoint however, the demonstration of the significance of cobalt is one of the most interesting of recent developments in the field of nutrition.

Waltner and Waltner (1929), while studying the toxicity of various metals on rats, showed that subcutaneous injection of powdered metallic cobalt, cobalt chloride, or cobalt nitrate resulted in a polycythæmia. Orten (1932) and other workers have confirmed this phenomenon in rats, dogs, pigs, rabbits, guinea pigs, mice, frogs, and chickens. It is a true polycythæmia, the increased blood volume being due to increased erythrocyte counts and increased mean cell volume, while the raised hæmoglobin was unaccompanied by any significant change in plasma volume. When the diet is copper deficient, the effect is not produced and feeding manganese with a milk-iron-copper diet seemed to alleviate the toxic effects resulting from administration of small amounts of cobalt. In addition, manganese also seemed to " potentiate " the cobalt effect.

The feeding of cobalt to animals on a diet otherwise adequate for blood formation initiates a reticulocyte response, but it is interesting that " liver extract " which does not produce a reticulocyte response in normal animals antagonises the effect. Barron and Barron (1936) found that when ascorbic acid was injected intravenously simultaneously with cobalt into rabbits, polycythæmia failed to appear and when ascorbic acid was injected after the production of the polycythæmia, a decrease, albeit temporary, in the hæmoglobin and red cell count resulted. These workers therefore suggested that the cobalt effect was due to inhibition of the respiration of immature erythrocytes (an explanation which seems to have some basis in the compensatory polycythæmia of high altitudes and other conditions of chronic anoxia) and hyperplasia of the bone marrow would result in a reticulocytosis.

Bush sickness, *coast disease* or *enzootic marasmus* has long been recognised in New Zealand, Australia, Florida and elsewhere as a disease of sheep and cattle. The condition was described in 1896 by Aston in New Zealand as a malady the main feature of which was wasting following upon anorexia, emaciation and progressive anæmia. When iron deficiency was discovered in the soils and herbage in areas where the disease was endemic, iron " licks " in the form of *limonite* (a hydrated ferric oxide) afforded some animals complete relief. In other cases, it was less effective or not at all. Underwood and Filmer (1935), after some years of study, showed that an iron-free preparation made by acid extraction of the *limonite* was effective as a prophylactic. Cobalt was soon shown to be the active principle and this provided the first evidence for the essentiality of cobalt in animal nutrition. *Bush sickness* is now ascribed to cobalt deficiency in soils and herbage, and it responds adequately to minute doses of pure cobalt salts. The deficiency syndrome has been reproduced by Marston et al. under laboratory conditions. They observed that the anæmia, which is a feature of *bush sickness*, is suggestive of an aplastic condition of the bone marrow with a gross reduction in the total number of all cells. Terminally, however, the blood picture becomes one of profound macrocytic anæmia, reminiscent of, but quite distinct from, classical Addisonian anæmia.

Sheep and cattle appear to be unique in their cobalt requirements. Marston (1950) reports that all attempts to produce cobalt deficiency in small laboratory animals have failed and that most of the claims in the literature for rats, mice, rabbits, etc., are of doubtful significance. He has a third filial generation of rats that have been sustained, with elaborate precautions and meticulous chemical control, on a diet containing less than 0·03 parts cobalt per million dry weight, upon which they remain dry and healthy. Sheep would certainly succumb to the deficiency within a year if confined to fodder containing this concentration of cobalt.

In pursuance of this problem in sheep and cattle, it was noted that no other animals succumbed to *bush sickness* and therefore these ruminants are either extraordinarily wasteful with cobalt or possess a unique biological demand. Sheep imported from normal pastures to the deficient littoral die from *bush sickness* but, post mortem, their livers contained a normal complement of cobalt. Even subcutaneous depots of slightly soluble cobalt salts did not benefit them. Marston found on investigation that cobalt, to be effective, must be ingested per os. When injected into the bloodstream it is valueless to the animal (apart from a possible polycythæmia) although the cobalt content of the organs may be increased tenfold. The site of action of cobalt is primarily in the lumen of the alimentary canal or during its passage through the wall, at a level above the duodenum—since isotopic cobalt (Co^{60}) injected intravenously and excreted in the bile into the duodenum is largely recoverable from the fæces. It is known that the nutrition of the ruminant depends considerably on the symbiotic flora of micro-organisms resident in its paunch. If the demands of these micro-organisms for cobalt, etc., are large compared with the requirements of the animal itself, then it is clear that the strikingly dissimilar behaviour between ruminants and other herbivora might be explained. (Marston, 1950.)

Interest in the nutritional rôle of cobalt has recently been diverted from ruminants by the announcement in 1948 of the isolation from liver of a crystalline form of vitamin B_{12}—Minot and Murphy's anti-pernicious anæmia factor. (Lester Smith.) This red, crystalline substance was found to contain cobalt, and minute quantities of it will correct the dyscrasia of human pernicious and other megaloblastic anæmias, and relieve the signs and symptoms of sub-acute combined degeneration of the cord. Progress has been rapid and other factors —vitamin B_{12} *a*, *b*, *c*, *d*, have been obtained from liver extract and the fermentation of liquors of *Streptomyces griseus*, a development made possible largely by the use of partition chromatography.

Although the actual isolation has been one of the major feats of organic chemical technique in this century, elucidation of its structure has presented considerable difficulty. Brockman et al. (1950) have shown that vitamin B_{12b} is probably identical with vitamin B_{12a}, the reduction product of vitamin B_{12}. The new factors, indeed, appear to be slight modifications of the vitamin B_{12} molecule. Workers at the Organon and Merck Laboratories have shown that in vitamin B_{12} a cyanide group is co-ordinated with the cobalt atom. Todd and the Cambridge School have recently isolated intact a large portion of the molecule comprising 5: 6–dimethylbenziminazole in a glycosidic linkage with a molecule of ribose, phosphorylated at C_2 or C_3. The cobalt-containing moiety is linked to this phosphorus atom. There are also two molecules of Dg–1–amino–2–propanol and ammonia linked in an unknown manner.

There is now little doubt that the extrinsic factor is simply vitamin B_{12} itself. When administered orally in cases of pernicious anæmia the pure vitamin is ineffective except in enormous doses. In normal gastric juice, however, its action is strongly potentiated. Ungley (1950) has shown that vitamin B_{12} combines with a factor in normal gastric juice—presumably the intrinsic factor—to yield a complex which is microbiologically inactive and non-dialysable. But, on autoclaving, the complex is split again, an active substance being yielded, presumably the regenerated vitamin B_{12}. (Lester Smith, 1951.)

It is interesting to note here that vitamin B_{12} is ineffective in the anæmia of *enzootic marasmus*. Nor is the A.P.A. factor, or pteroyl glutamic acid effective by mouth. This anæmia is probably the breakdown of a link in the chain of metabolic events responsible for erythrocyte maturation, a link other than that which fails in pernicious anæmia. Further, although there is a dramatic change in general health when cobalt is given to sheep suffering from *enzootic marasmus*, the anæmia clears up relatively slowly, indicating that the physiological disability is due to other general causes besides anæmic anoxia. Perhaps cobalt has other fundamental functions in the organism apart from erythropoiesis.

Physiology of Copper

Copper, in the form of an alloy with tin, gave its name to the Bronze Age of civilisation, but in spite of its wide occurrence free in nature, it is not an invariable micro-constituent of animal and plant tissues.

Hæmocyanin occupies a unique rôle among arachnids, molluscs and crustaceans. It is a copper protein which circulates in the blood of these invertebrates and differs from hæmoglobin by the absence of a porphyrin ring and being in free solution in plasma. It subserves the function of oxygen transfer. Both hæmocyanin and oxyhæmocyanin contain monovalent copper. Schmitz (1931) obtained a protein-free copper derivative of hæmocyanin termed *Hæmocuprin*, while Conant et al. (1934) formulated the prosthetic group of *Limulus* hæmocyanin as a copper-complex of a polypeptide containing the amino-acids leucine, tyrosine and serine, together with an unidentified sulphur compound.

Turacin ($C_{82}H_{81}Cu_2N_9O_{32}$) is the pigment in the feathers of the South African bird, *Turaco*. Church (1869) first described the content of copper in this substance. Turacin is analogous to hæmatin, forming a turacoporphyrin by the action of strong sulphuric acid. In fact, Laidlow (1904), who showed that hæmatin could be produced by simple union of hæmatoporphyrin and iron, also produced a copper porphyrin compound synthetically which resembled turacin. He believed that turacoporphyrin and hæmatoporphyrin were identical, but the more recent work of Fischer and Hilger (1923) showed that turacin is probably a uroporphyrin. These workers suggested that the physiological rôle of copper might be one of detoxication of free porphyrin in the blood of these animals, since free porphyrin would render them photosensitive. The function of copper here is still an open question, but turacin stands out as the only relic known of any relationship that might have existed between this metal and porphyrin compounds. Rimington (1939) has shown that turacin is a type III uroporphyrin, like the uroporphyrin III excreted in excess in the human diseases of congenital and acute porphyria.

The dark brown or black ink of octopuses and squids consists of a fine suspension of melanin, elaborated by a special gland, the ink sac. The walls of this sac are very rich in both copper and tyrosinase. Tyrosinase is the main enzyme of a system of polyphenol oxidases which accomplish the feat of melanin synthesis and it would appear that copper is universally essential in animal pigmentation.

Evidence in this direction has accumulated as follows. Keil and Nelson (1931) noted that dark-coated rats made anæmic by restriction to a milk diet underwent marked changes in the pigmentation of hair—black hair became silvery-grey. Since iron supplementation did not restore the colour, whereas iron and copper together were effective, it was indicated that copper has a rôle in pigmentation. Cunningham confirmed this. He also found a significantly higher content of copper in the skin of black rats and rabbits than in that of albinos, and suggested a catalytic rôle for copper in the biosynthesis of melanin. Gorter (1935), after trials with other metals, showed that this effect is specific to copper, the doses required to restore normal pigmentation being higher than amounts required for the amelioration of the anæmia. The relation of copper to tyrosinase in human skin remains unsettled, but a new field has been opened up by the correlation of this depigmentation of copper deficiency in experimental animals with that consistently observed in pantothenate deficiency.

Deficiency of pantothenate in rats gives rise to a characteristic type of greying. Recent work by Singer and Davis (1950) suggests a possible metabolic relationship between copper and this vitamin. With one group of fifteen rats they showed that a consistent, peculiar grey, indistinguishable from that of pantothenate-avitaminosis, was produced by copper depletion of these rats. Their colour was restorable by feeding adequate amounts of either copper or calcium pantothenate. The control group of fifteen rats retained their colour when fed on the same diet (and therefore the same level of pantothenate) as the experimental group, with added supplements of copper sulphate. This raises interesting possibilities. Apparently, the rat requires an increased amount of pantothenic acid when there is a copper deficiency. Why copper, given to canaries in their drinking water, brightens their yellow feathers, is perhaps a relevant question at this stage !

In addition to its rôle in pigmentation of hair, etc., copper appears to play an essential part in the actual process of keratinisation. When other nutritional requirements (except copper) are satisfied in sheep pastured on deficient littoral, a syndrome gradually develops which responds specifically to copper therapy. By appropriate treatment of the diet of the sheep with adequate supplements of copper, Marston and his co-workers were able to produce " an ordered series of deficiency states that ranged from the frank syndrome in the untreated animal to an incipient state in which overall activity was impaired without the appearance of specific symptoms."—(Marston, 1950). In this way they observed that the first metabolic process to go wrong in copper deficiency is the chemical process concerned with keratinization. Further depletion leads to a disordered iron metabolism as evidenced by a hypochromic anæmia and hæmosiderosis. They observed that a morphological deterioration in the wool, summed up as a " loss of crimp," regresses on addition of copper to the diet. On the basis of these considerations a biochemical lesion has been postulated for this syndrome. The loss of crimp is inseparable from the depigmentation of hair of copper deficiency.

Concurrently with the above, work has been going on to elucidate the part copper plays in hæmopoiesis. The Winconsin School, led by Hart et al. (1924), observed that young rats fed on a milk diet developed an anæmia which proved refractory to pure iron preparations. This was confirmed in experimental studies which followed, and it was shown that supplements of copper added to the iron-milk diet completely relieved the anæmia. McHargue and subsequent workers have since repeated these experiments successfully, but the most significant proof of the need for copper lies in the finding that a progressively severe and fatal anæmia can be produced, even when iron is added to a milk diet of young rats from the time of weaning. The amounts of copper required are very small (5 micrograms daily).

Cunningham (1931) showed that administration of copper to animals results in a reduction in the amount of inorganic iron stored in the liver and a corresponding increase in the organic form. Elvehjem et al. have also shown that pure iron salts given to anæmic rats were assimilated and stored in the liver and spleen, but subsequent administration of copper alone brought about a conversion of inorganic to organic iron in the liver. It does appear, therefore, that although copper is not essential to absorption and storage of iron, yet in the ultimate utilization of this element for hæmopoiesis it is a *sine qua non*.

Further, Schultze and others have been impressed by the observation that blood was the only tissue studied in which a large accumulation of copper accrued when copper was fed to an animal previously depleted of this element. It was postulated, therefore, that extremely small amounts of copper are required, perhaps catalytically, for hæmoglobin formation. These studies have been extended to other species including chicken, sheep, dogs, cattle and goats. Schultze and others postulated that, in general, rapid continuous hæmopoiesis cannot occur unless the blood copper level is above a certain minimum—about 20 micrograms per cent. for pig's blood.

This work is of practical interest in agriculture where anæmias which respond to iron therapy only in presence of copper have been described. The therapeutic rôle of copper has not been established in clinical medicine in view of the many conflicting results that have been published hitherto.

Of considerable interest physiologically are other observations relevant to the rôle of copper in hæmopoiesis. Fœtal liver is a hæmopoietic organ, and large stores of copper are found in it compared with adult liver. It reaches a maximum in the human embryo at term, rather later than has been observed in chickens and pigs. It has been suggested that this is nature's provision of copper for the young animal whose early diet, milk, is bound to be grossly copper-poor. Whether this is so, or the alternative suggestion that copper found in the liver at term is a residue of the big store acquired for hæmopoiesis *in utero*, it is clear that demands of this metal for " growth " are indispensable. The high levels of blood copper in pregnancy appear to confirm this. Ever since Krebs, in 1928, demonstrated this finding, many workers have confirmed it and now think it is accounted for by the mobilisation of copper from the mother's liver to the fœtus via her blood stream. Many questions have also arisen by the finding (R. H. S. Thompson and D. Watson, 1948) that pre-eclampsia is characterised by steep gradients of copper above the already raised values of blood copper in normal pregnancy.

It is well known (Marston, 1950) that a low copper status in pregnant ewes leads almost invariably to neurological sequelæ in lambs. In this disease, *swayback* or *enzootic ataxia*, it appears certain that we are dealing with a defect in copper metabolism affecting the central nervous system. It varies in severity from a complete paralysis of the lamb at birth to a bland ataxia in the first six months. Pathologically, *swayback* is a symmetrical, cerebral demyelination and degeneration of the motor tracts. Investigations by various workers led to the exclusion of bacterial and virus infections, and toxic causes from such metals as lead. The conclusion now held is that this is a deficiency disease, the prophylaxis of which is copper-licks for the pregnant ewes—copper being *essential for the myelination.*

Very often in the history of science a problem appears solved--only for further questions to demand its reconsideration later. So it was with the rôle of copper in demyelinating diseases in sheep. In the past decade Innes has noticed the relatively frequent occurrence of *disseminated (multiple) sclerosis* among workers in the field of trace element nutrition, particularly *swayback*. The story of four out of the seven senior members of a team of Cambridge workers who developed neurological signs indistinguishable from *disseminated sclerosis*, is well known. (Russel, Honor Smith et al., 1947.) Has copper deficiency to be considered in the ætiology of this disorder, or are we dealing with toxic effects in chemical workers who have been exposed to an occupational risk as yet unidentified ? Or is there an infective cause, a virus, which operates only in the presence of a low copper status ? If so, then the previous conclusion in *swayback* may be half the truth. Relatively high amounts of copper are known to occur in the *Vaccinia* virus (Hoagland, Rivers, etc., 1940). But recent work (R. H. S. Thompson et al., 1948) has failed to show any significant differences in blood copper or copper metabolism between normal subjects and patients suffering from *disseminated sclerosis*. In another nervous degenerative condition, *hepatolenticular degeneration*—the invariably fatal Wilson's disease—a bilateral, symmetrical degeneration of the lentiform nuclei co-exists with hepatic cirrhosis. In this condition, blood copper is significantly raised. The relation of this to the classical observations of Bodansky (1921) and others, who showed that in the central nervous system copper concentration is low in the basal ganglia (caudate and lentiform nuclei) and high in the substantia nigra, remains obscure. This is true for man and other mammals, although there are notable exceptions.

In small quantities, copper is known to stimulate germination and the growth of many plants, particularly the *Leguminosæ*. Evidence has accumulated in favour of this view over recent years. In 1931, Summer found that the addition of small quantities of copper induced a considerable increase in the growth of sunflowers, flax and tomatoes, while in the same year Lipmann and Mackinney found that flax and barley grown in water culture failed to produce seed in absence of copper. Work by Anderson (1932) in South Africa, Osserkowsky and Thomas (1933) in U.S.A. indicates that chlorosis and the dying-back of various fruit trees resulted from a deficiency of copper. Further, a pathological condition of cereals and other plants growing on reclaimed heathland in Holland and elsewhere (so-called *reclamation disease*) was attributed by Sjollema (1933) to copper deficiency. In cereals exhibiting this condition, the leaves turn yellow or white and seeds fail to form, but these changes can be reversed by adequate provision of copper. The fundamental rôle of copper in the metabolism of these plants is not clear, but it is possible that part of the catalytic process which is ascribed to iron in chlorophyll synthesis may be due to traces of copper.

Concentrations of copper above the level which is optimum for growth are markedly toxic for all forms of life. This is particularly true for the micro-organisms. O'Meara and MacSween (1936) observed that a failure of *Staphylococcus* and other pathogenic bacteria to grow in culture media may be due to the presence of copper which often contaminates the peptone employed in preparing the solution for the culture medium.

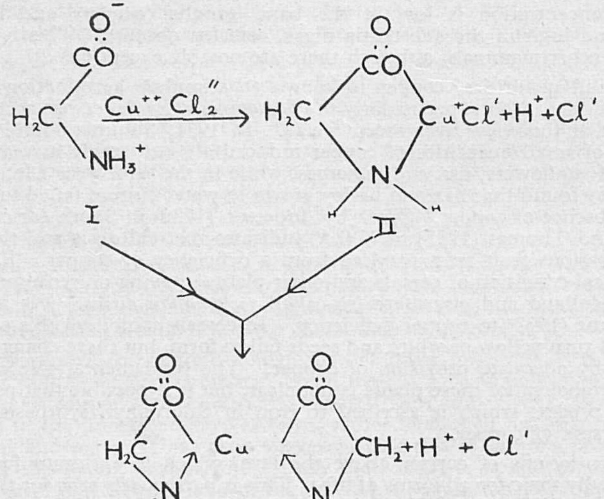
In concluding this physiological survey it is pertinent to consider the fate of ingested copper in the animal body. To be effective biologically, this metal must be ingested in a water-soluble form, since Schultze, Elvehjem and Hart (1934) showed that copper caseinate or glycine, but not copper hæmatoporphyrin, relieved the nutritional anæmia of rats. Copper is also better absorbed on a low calcium diet (Tomshett, 1940) and in the absence of high sulphide-containing foods like eggs. Increased intake results in increased retention in the tissues only within limits, so that a very high level of ingestion does not lead to depot formation. In a study of copper metabolism in man, Van Ravesteyn (1944) found that copper is absorbed from the intestine and passes to the liver where it is stored. Excretion into the digestive tract occurs in the bile, so that some fæcal copper may have made this circuit. Excretions of copper via the bile and in the stools were not found to run parallel, so that at least part of the metal is eliminated through the intestinal wall. The urine is of minor importance, since the content of urinary copper is not significantly raised, even after the intravenous administration of Ebesal (a copper preparation). This is confirmed by the finding that 90% copper in human serum exists bound in the globulin fraction of plasma.

COBALT, COPPER AND CELL METABOLISM

" The availability of biological elements sets the limits to the expansion of life." This confident assertion of Liebig (" The Law of the Minimum ") is one whose validity lies more in philosophy than chemistry. Nevertheless, there is little doubt that the ultimate nature of chemical elements decides their physiological function.

Both cobalt and copper, like other " transitional " elements, have a remarkable capacity for forming complexes, this property being responsible for their intrusion into the sacred field of carbon chemistry. Albert has recently made quantitative studies into the mutual avidities of these metals and naturally occurring substances like amino-acids, proteins, pterins, porphyrins, riboflavin and various purines. He introduced the concept of cells and tissues as areas in which metallic ions are cômpeted for by various complex-forming agents. (A. Albert, 1950.)

The reaction between glycine and cupric chloride, for example, may be expressed thus :—



Physiologically, trace metals can exert their influence on three fundamental biological processes :

1. In the formation of tissue elements, e.g., copper in hæmocyanin and pigmentation ; cobalt in vitamin B_{12}.

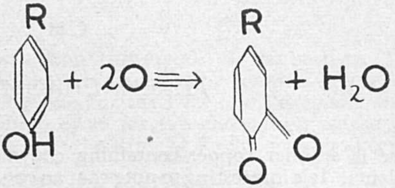
2. In energy-supplying systems, as part of enzyme systems involving cytochrome, oxidation of carbohydrates and fatty acids.

3. In the regulation of physiological activity, nervous or hormonal. The part of copper in the neurological disorders previously discussed is significant here.

These functions are achieved probably by a catalytic machinery involving *catalytic surfaces*, which are specialised areas in the cell mosaic, or *catalytic solutes* like gluthathione, ascorbic acid and colloidal enzymes. (Fearon.) The enzymes are the most important in cells for copper and cobalt activity, although it is interesting to note that copper occurs in lesser proportions as we ascend the evolutionary scale, and the more primitive cells (like bacteria and foraminifera) have a wider range of metals concentrated. A few specific examples will now be considered.

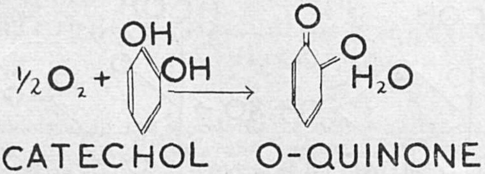
PHENOL OXIDASE ACTIVITY OF COPPER.

This class of aerobic oxidases are copper proteins and are known to be responsible for the browning on exposure of cut surfaces of plants and fruits. Monophenol oxidase extracted first from mushrooms catalyses the change :—

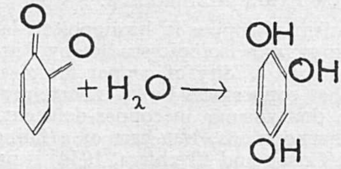

R
OH
+ 2O ⟹
R
O
O
+ H₂O

Polyphenol oxidases (mushrooms and potatoes) act thus :—

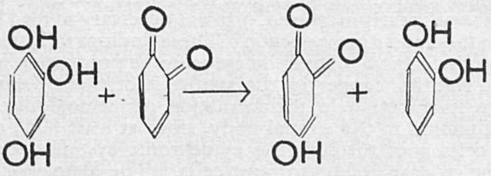
(i)


½ O₂ +
OH
OH
O
O
H₂O
CATECHOL
O-QUINONE

(ii)


O
O
+ H₂O ⟶
OH
OH
OH

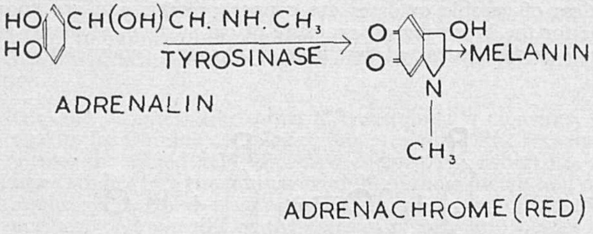
(iii)


OH
OH
OH
+
O
O
O
O
OH
+
OH
OH

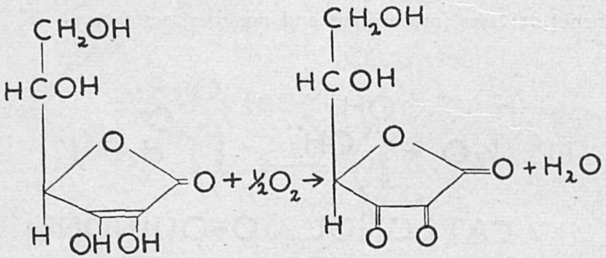
(iv) Polymerisation of hydroxyquinone to dark coloured melanic products.

For tyrosinase, the evidence for its copper content is circumstantial, by analogy with its presence in the walls of the ink sac of the octopus. Hence, the rôle of copper in pigmentation, also confirmed by the hereditory absence of tyrosinase in the skin of albinos.

The physiological detoxication of adrenaline is also achieved by tyrosinase:—



Ascorbic oxidase is another copper-containing enzyme isolated from the *Brassica* family of plants. It is interesting to note that an egg albumin and copper ions mixture can imitate the action of ascorbic oxidase in bringing about this change :—



Ascorbic Acid. Dehydro-ascorbic Acid.

Copper and Porphyrin Metabolism.

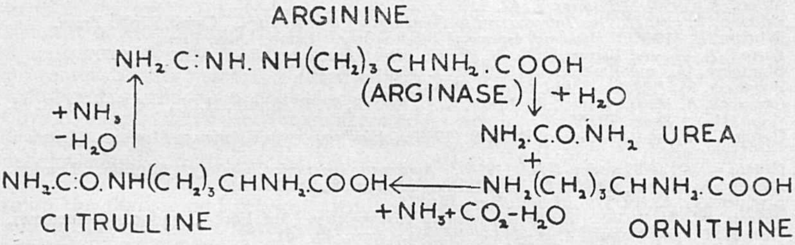
The mechanism of copper in hæmopoiesis is unknown, but correlation of the recent findings from isotopic studies by Rittenberg of the part played by glycine and the high avidity of copper for α-amino acids (Albert) leads to the postulate that copper acts by its linkage properties with chelating agents. The suggestion that anæmia in copper-deficient animals is not a specific derangement of hæmopoiesis, but part of a failure of enzyme systems which require copper (Cohen and Elvehjem, 1934) is probably true. Their work on cytochrome *a*, *b* and *c* in rat tissues, when these animals were depleted of copper, showed that the *a* component was absent or much reduced in the heart and liver cells but only slight reduction occurred in the *b* and *c* series. When copper alone, or copper and iron, were added to the milk diet, the *a* component was greatly increased. It was necessary to feed both iron and copper to increase the *b* and *c* components. These findings tally with those of Elvehjem concerning the effect of copper on cytochrome production in yeast, and indicate a catalytic rôle for copper in the synthesis of these hæmochromogens, quite apart from its function in the formation of hæmoglobin. This is an indispensable function in the animal body, since at least 80% of all the respiration of living cells goes through the cytochrome system. Cyanide poisoning of cytochrome oxidase is fatal to most cells. The history of porphyrin synthesis in the body is full of speculation, but there seems little doubt that copper exerts a fundamental rôle in porphyrin metabolism.

Copper and Keratinization.

Mention has been made of Marston's work in this field. This fundamentally involves the thiol (—SH) residues of the pre-keratin fibrillæ of the sheep's wool. Copper is known to link up with thiol groups easily. Marston and his associates found that they could stain these free thiol residues specifically deep purple by dipping the base of the hair follicles in alkaline nitro-prusside. It was found that in the low copper-status sheep's hair there was a long zone (approx. 1,000μ) staining intensely and ceasing abruptly in the fully keratinized portion. In normal sheep, staining was possible only within 100μ of the base of the hair. Dosing of the deficient sheep with copper brings the zone of free thiol groups down within a few hours. This evidence leaves little doubt that copper is responsible for catalysing the oxidative closure of the thiol residues of the pre-keratin fibrillæ to the disulphide linkages of keratin. The rate at which the reaction proceeds is a measure of the copper status of the sheep.

COBALT.

Much less is known about this metal. It has been said that the manganese-containing enzyme arginase is activated by cobalt. The rôle of arginase in the ornithine cycle is a key one, for the liver of all ureotelic animals contains this enzyme. The ornithine cycle for the elucidation of the mechanism of urea formation is due largely to the work of Krebs on liver slices :—



Zymohexase (aldolase) in the glycolytic reaction sequence is a metallo-protein (containing zinc, iron, cobalt and copper). It was crystallised by Warburg and Christian, 1943. It is responsible for the reaction :—

Fructose—1 : 6 diphosphate

$\rightleftharpoons$ Zymohexase.

Glyceraldehyde–3–phosphate
+
Dihydroxyacetonephosphate.

VITAMIN B_{12} is so far the most important complex in which cobalt is involved. There are indications that this substance has other functions than hæmopoietic, although its precise mechanism in hæmopoiesis is still obscure. It has a growth-promoting action which makes it a true vitamin in the classical sense, since it promotes growth in pigs, chicks, turkeys and perhaps backward children (Werzel, 1949).

It appears vitamin B_{12} is concerned in transmethylation reactions. Chicks on a deficient diet can utilise homocystine as an alternative to methionine only when vitamin B_{12} is given (Jukes, Stokstad and Broquist, 1950). They have also put forward an ingenious scheme relating the activities in bacterial metabolism of vitamin B_{12}, certain desoxyribosides, and folic acid. There is some evidence that vitamin B_{12} is important in folic acid synthesis and hence for the incorporation of simple purines and other molecules into nucleic acids.

It has been known that an increased phenol excretion in the urine occurs in pernicious anæmia. This is diminished, along with the clinical remission, on liver extracts. Abott and James (1950) have confirmed this phenomenon with crystalline vitamin B_{12}. It has been the basis for the so-called " toxic factor " of pernicious anæmia, but its real significance is yet unknown.

" In due time, these observations will be welded together into a coherent theory of the mode of action of vitamin B_{12}, but as yet there is little clue to the mechanism of its hæmopoietic activity beyond the suggested function in the building of nucleic acids."—(Lester Smith, 1951.).

The difficulties of microchemical technique, especially partition chromatography and spectrography, and the rapid advances that have occurred recently, make it difficult to predict the future of trace elements in nutrition. Copper and cobalt no doubt have a place in human dietetics, but the present state of knowledge calls for no anxiety about them. The normal human dietary contains adequate quantities of these elements, as we have shown. Nevertheless, in the process of working out mixtures of foods to constitute the dietaries of the sick and perhaps normal people and animals, the nutritional expert will have to take cognisance of the part these metals play in intermediary cell metabolism.

ACKNOWLEDGMENTS

My thanks are due to Professor G. A. D. Haslewood of Guy's Hospital Medical School for reading and criticising the script and to Mr. D. Watson, formerly of the Department of Chemical Pathology, Guy's Hospital Medical School, for a guide to the literature.

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THE PHYSICAL SOCIETY

The Physical Society held two meetings in October. At the first, Dr. Maclean spoke about the Society and Dr. Maurice Campbell was elected the Honorary President. The following were elected presidents : Mr. R. K. Allday, Miss L. P. D. Bellam, Miss J. E. Brett, Mr. C. P. B. Brook, Mr. R. Y. Calne, Mr. A. G. F. Dominick, Mr. R. H. Farrell, Mr. I. C. Fuller, Mr. R. G. Orr, Mr. E. D. Sonnenfeld, Mr. A. P. D. Stewart, Mr. M. K. Strelling, Mr. E. E. D. Tomlin, and Mr. J. L. Turk.

A successful clinical meeting was held on 18th October under the presidency of Mr. Farrell, Mr. Fuller and Mr. Orr, who, assisted by Mr. Turk, showed patients with amyloidosis, constrictive pericarditis and two problematical thyroid swellings.

The next event will be a combined clinical meeting with St. Thomas's on 8th November. Cases will be shown in the Preclinical Classroom at 6.0 p.m. and will be discussed in the " Spit " at 8.0 p.m. At 7.0 p.m. there will be a buffet supper in the " Spit ". To help catering arrangements, Guy's people are asked to buy supper tickets in advance for 2*s*. 6*d*. This will include the cost of a pint of beer. Tickets can be obtained from the presidents for the occasion—Mr. R. Y. Calne, Mr. J. H. Smith and Mr. E. D. Sonnenfeld.

Memories of Guy's

By A. R. THOMPSON, Ch.M., F.R.C.S.
Consulting Urologist, Guy's Hospital

III. THE SPECIALISTS AT GUY'S HOSPITAL IN 1898-9

(*Continued*)

THE members of the staff already mentioned had, as colleagues, men who were in charge of certain departments, viz., gynæcology, aural surgery, ophthalmology, diseases of the throat and diseases of the skin. As I have previously indicated, otology was the concern of a general surgeon, Symonds, and dermatology that of a general physician, Perry. Symonds was very good when performing operations upon the neck and, I suppose, he found this experience very useful in his work upon the throat. He designed a tube for the treatment of inoperable œsophageal growth. It had a projecting brim at the top. Inserted on a long introducer, it was pushed through the stricture or growth until the rim rested upon the upper edge of the obstruction. A long piece of silk, attached to the end of the rim previous to introduction, prevented further passage of the tube through the growth. With the mucous membrane of the œsophagus intact, this device was very useful, but it had obvious dangers when used for an ulcerated growth. Whether it is still employed I cannot say, but improvements may well have been introduced without acknowledgment to the original source, a common enough omission with certain gentlemen. In this connection it may be mentioned that Symonds' operations upon the thyroid and cervical glands, either tuberculous or malignant, were among the best that I have ever seen. I remember him excising a malignant thyroid in a girl of fifteen who showed signs of sexual precocity. I am not sure that the condition was recognised until the histological examination was made. The girl did very well immediately afterwards, but I have no idea what happened to her eventually.

The skin department, as managed by Perry, I have already described. The ophthalmic surgeons were Higgens and Brailey, who were as different from each other as chalk from cheese. Higgens was a dapper little man, with good and neat muscular development, a healthy glow upon his clean-shaven face, and eyes that looked at you, through you, and cut you if you tried to " bluff " him. He had a sharp incisive voice. He was a good horseman and took up boxing as a relaxation. At the Bath Club he boxed with great activity until he was " rising seventy." Why or how he died I do not know ; of some infantile complaint I am sure, for he went long before his time was really up. He should have lived into his nineties. He was a man for whom I had an immense affection and respect, though I was not one of his intimates. I should like to make my readers understand that, in addition to his sporting proclivities, Higgens was a very able man indeed. He gave admirable lectures embodying both his own vast experience and a wide knowledge of the work of others. I am not sure that his like has ever been found since. He was also a very good operator, not only on the eye but on other parts as well. It is recorded that Golding-Bird, after watching Higgens tie the common carotid artery, then believed to be the cause of certain eye symptoms, declared that it was one of the neatest operations that he had ever seen. Higgens was an excellent diagnostician too. In fact, I strongly suspect that he worked and read far harder than he ever cared to admit. I should place him as one of the ablest men I have ever met.

I owe him, indirectly, a very great dept of gratitude. One day I picked up a Guy's *Gazette* and, in it, found an excellent lecture on the subject of proptosis. I read it through with great interest and, as events proved, much profit, for in a fortnight's time I was reading another paper with very short articles in it. They were the questions set for the final fellowship examination. One of these dealt with the subject of exophthalmos, which I was scholar enough to know was the same thing as proptosis. That was the only difficulty, thanks to Higgens, which I encountered in answering the question.

Brailey was a very different type of man. I fancy that he had been an applicant for the chair of anatomy at Owen's College, Manchester, when A. H. Young had obtained it. However this may be, Brailey was rather of the academic type, without any practical skill worth mentioning. He was, indeed, an operator of little merit, but his refractions were performed skilfully and quickly. With a scrubby beard, a bent back, a sallow face and very thick lips, he was nevertheless a very kindly man, and he and Mrs. Brailey used to give dances, which must have entailed great expense, to which the students were invited. Of two sons, one followed his father's speciality and succeeded in obtaining a considerable practice, although he was never elected to the staff at Guy's. He lost his life in some channel yacht disaster a few years ago.

The story which I have to relate about Brailey concerned Higgens as well. When I was resident medical officer in Bright ward during two months in 1903, Brailey arranged to do an operation of some kind for strabismus. The patient was got ready, placed on the operating table and I gave the anæsthetic. Everything was going satisfactorily and Brailey had made an incision into the conjunctiva. Thereupon Higgens, becoming aware of the project, crept into the theatre and asked Brailey what he was doing. Upon being told that the operation was for strabismus Higgens studiously enquired if orbital aneurysm had been considered and, after shooting this arrow, promptly retired. Brailey scrubbed his beard, began to think matters over and eventually asked me if I thought that Higgens really meant what he had said. I said of course not. But Brailey was evidently very much impressed with the question and, with further scrubbing of the beard, murmured that Higgens might well be right. I insisted that only a joke was intended. Brailey nevertheless seized a suture and needle, sewed the edges of the divided conjunctiva together, applied the necessary dressings and abandoned the operation forthwith. In the light of the present practice of not treating every case of strabismus by some operation on a muscle, it may be that he was right. Yet the whole affair seemed thoroughly fatuous. I never told Higgens the story, for he would have been sorry, not merely for the patient but for Brailey too.

A. W. Ormond was the ophthalmic registrar in those early days and took an immense amount of trouble in demonstrating cases to the students. In spite of the three men whom I have mentioned, the man to whom I personally owe most for any knowledge of ophthalmology that I may possess, was Eason. He was then clinical assistant at Guy's and also at Moorfields. I used to walk over to Moorfields in 1907 and listen to Lawford discussing the different aspects of eye lesions with Morton, of ophthalmoscopic fame. Lawford was in charge of the ophthalmological department at St. Thomas's. I never knew him well, but he was a very sound teacher. Morton was excellent. On our way back from the eye hospital, Eason and I used to discuss various items of ophthalmic interest, or rather Eason used to talk about them and, in so doing, impart much interesting information to me. The way in which he used to do refractions impressed me very much, for he was rapid and accurate. Thinking about notable ophthalmic surgeons I now wish to ask a question. How can a physician diagnose optic neuritis in a patient with a minutely contracted pupil as so many of them used to do in the old days ?

We may now pass to the description of another specialty surgeon. At the corner of Newcomen Street and Maze Pond, there was an entrance into the out-patient department of the Hospital that was hardly known. It may have been kept locked. So far as I know it was used by only one man, who walked along Newcomen Street and entered Guy's by that mysterious door every Tuesday afternoon. A man, travelling in the train along the coast of Kent one day, looked out of his carriage window and saw the golfing possibilities of an otherwise barren area in the neighbourhood of Sandwich. He thought about matters and, as a result, the world-famous golf links of Sandwich were designed and came into being. A canny Scot, who lived in Cavendish Square, once obtained substantial compensation from the Central London Railway for damage done to his house on the northern side of that square, by the line, as it passed between Bond Street and Oxford Circus. The man who entered the Hospital so mysteriously, the man who had the prescience about Sandwich and the man who obtained damages against the railway company were all one and the same person—Laidlaw Purvis, the aural surgeon at Guy's in my student days. I never saw him operate except on adenoids, which he scraped away with his sharp finger-nail, the patient lying on the surgeon's knees. Fagge, then his assistant and later his successor, was responsible for what little knowledge I derived about ears.

I must now speak of the gynæcologists who were on the staff when I first joined the Hospital. At that time the two seniors were Galabin and Horrocks. Targett, who had recently been registrar, was the assistant surgeon and G. B. Smith had just come on as registrar.

A. L. Galabin had been a " wrangler " at Cambridge and, at one time, had done some work dealing with the scientific side of medicine, especially with the sphygmomanometer. He lectured on midwifery and his lectures were as full of stones as the Cenotaph in Whitehall, and about as inspiring. If he did not actually read from a text, he nevertheless used very full notes. There was consequently no animation about his delivery and the mathematical explanations which he was able to supply in very full measure were far from attractive to the majority of students. Although he was an M.D. and an F.R.C.P. he practised operative gynæcology, proceeding by the abdominal route which, at some other hospitals, was not permitted to people with such qualifications. He was most thorough and painstaking in his sewing up of abdominal wounds, placing sutures in every layer of muscle or of fascia that he could find. He wrote a book, which was quite popular at one time, in which he gave mathematical explanations of the various movements of the fœtus in the maternal passages. Whether he was accurate or not, I am neither mathematician nor gynæcologist enough to say. Still, I always suspect those who, with numerical formulæ, attempt to explain the practical matters of everyday life. P. G. Tate of Edinburgh, who was Professor of Physics there, is reported to have arrived at the conclusion that a golf ball could not be driven more than a certain distance. It is further reported that on the very afternoon when he completed his calculations his son, the famous amateur golf champion, drove a ball forty yards further than his father had concluded was possible ! Hobson, Professor of Mathematics at Cambridge, arrived at the speed at which a boy, riding a bicycle without using the handle bars, would have to attain in order to remain upright. He went out from his house immediately after finishing his calculations and the first person that he saw was a boy contriving not only to balance a bicycle without touching his handle bars at a pace about half that which the learned professor had determined was possible, but also to carry a heavy basket behind him at the same time !

Horrocks was a hearty Lancastrian. His lectures given during the summer months on the subject of gynæcology were practical, popular and couched in familiar language. Unconscious epigrams were not at all uncommon and his sayings were remembered by all the students. He was very fond of good living and gave excellent dinners at his house in Brook Street. He was also a great mountaineer and in one issue of the *Gazette* there is a very interesting account of an accident in the Alps which nearly ended his life. Horrocks was one of the first of the gynæcologists to urge the revival of Cæsarean section. The great question at the beginning of this century concerned the exact time at which it should be undertaken ; namely, before or after the pains of labour had become manifest. Horrocks, I think, considered that the hæmorrhage was more easily controlled once labour had commenced. One day a patient was admitted with the signs of pregnancy and the pains had begun. Horrocks decided upon Cæsarean section. A large crowd of students was expected and half the gynæcological ward was cleared. Sure enough, the attendance was an immense one. Unfortunately, the worst anæsthetist on the staff was the only one available. Though his attention was drawn to the bad state of the patient it was not until she was dead that he desisted from his ministrations. When Horrocks saw what had happened he whipped out his knife and said, " At least I will save the child." Assisted by Targett, he cut down upon the uterine cavity and, with some difficulty, removed the fœtus—a macerated specimen which had obviously been dead for a considerable time. Targett pronounced it an ectopic gestation and this, in fact, was the case. Which all goes to show that people who are keen on a certain operation should be particularly careful in their preliminary examination before they venture to embark upon their favourite course of action.

Targett had hoped to get on to the surgical staff at Guy's. His forte was morbid anatomy and his knowledge and experience in this fascinating subject ranked equal to that of Shattock at St. Thomas's. The selection, however, of someone else for the surgical vacancy which then occurred led Targett into gynæcology and obstetrics. He was a very painstaking man, most sympathetic with his patients, and they, in turn, all worshipped him. In some of his prescriptions he was almost homoeopathic. He frequently made visits on a Sunday and used to go round with the sister alone. He and the students never knew each other. He was perpetually thinking about some abstruse pathological point and, when conversed with, his thoughts, like those of the dying gladiator, were " far away." On one occasion when I was a " clinical " there was a rare and interesting skin lesion in one of the wards, named after some foreigner whose name I have long since forgotten. Perry saw the case, and thought that the diagnosis was obvious, but as he was going out of the ward he met Targett and said to him, " Now, Targett, come along and see a case of interest, and throw away all your knowledge of speculative pathology and gynæcology, and tell me what you really think about it." Targett did as he was told and a most interesting discussion ensued.

The surgeon on the gynæcological side who came next in order of seniority was Bellingham Smith. I thought, and still think, that next to Lane he was the best operator at Guy's Hospital. He was rapid, he was careful and he had the patient's future always in mind. But as he died only recently I can say nothing more about him, except that he was very fond of collecting old prints. Whenever he was in the neighbourhood of any of the shops that deal in this kind of thing, the price of prints invariably went up as soon as it was known that G. B. Smith was on the track of some of them.

We may leave the gynæcological surgeons now and pass on to an account of one of the greatest characters at Guy's in my young days. G. H. Savage, afterwards Sir George Savage, was the great " mad doctor " of those times. I can still see him, well over seventy years of age, stalking swiftly along Harley Street, looking as if he were laughing at some memory that had come into his mind. Much of his great wit depended for its effect upon his wide mouth and somewhat clown-like appearance. But at his lectures he made us all roar with laughter, and after each joke he would contort his face and one felt that he was wondering if he had taken us in once again. In his earlier days he had been in practice at Hexham in Northumberland, but he did not remain there for very long. Though a witty man, I am not at all sure that he was a really good teacher, for the whisper of him that comes across the years is very faint to me now.

Here are two stories that he always told with great gusto. In his very early days he was called into consultation about a case and was expected to say something in particular about the prognosis. He saw the patient in the top room of an enormous house in the best part of London. After making the examination he came downstairs to make his report. Assembled in the dining room were rank after rank of the patient's relations and friends. Savage said that the outlook was pretty good and, when asked about the possibility of suicide, he replied that that tragic event was not in the least likely to occur. As he uttered these words he heard a thud outside the window. The patient had thrown himself down from the top floor of the house and the body had landed in the stone area outside the basement. The other story was told at Bethlem, where students used to go two or three times to see the mental cases there. He was demonstrating the ideas of grandeur that rush like a spate of a Scotch stream in flood-time from the lips of a general paralytic. One man was interviewed and complained bitterly that he was not being treated with the respect due to his exalted rank, which was that of the Prince of Wales. Savage bowed gracefully to the Prince, and the next case came up for examination. This patient had heard every word of the conversation in the previous interview and, tapping Savage on the shoulder, he very seriously expostulated with him for having addressed the previous patient in such an obsequious manner. " For," said he, " you are wrong. I am God Almighty, and I do not even know him."

Craig followed Savage and very successfully filled his master's place. I learnt from Craig never to take a morphomaniac off his morphine without the precaution of giving him some other soporific. Craig initiated some of the changes that have taken place at Guy's in the matter of the teaching of mental and nervous diseases. Now-a-days the two subjects are taught by different people and, at one time, when Sir Arthur Hurst was conducting a department for the study of nervous disease, Craig attended in order to see those cases which presented some mental trouble.

(*To be continued*)

Correspondence

Clubs' Union Ball

SIR,—May I be permitted to use the *Gazette* columns to publicise a new venture of the Clubs' Union.

Early this year the Clubs' Union Council discussed the possibility of the Clubs' Union holding an annual ball, in response to suggestions from a number of student members, and it was decided that such a function should be held. Feeling in favour of this was supported by the disappointment of many students over the Residents' Ball.

Arrangements have now been completed and I would like to draw the attention of members to them. The Ball is to be held on Friday, 11th January, 1952, at the Park Lane Hotel, and will include the serving of dinner, at a cost of three guineas for a double ticket. Applications for tickets may be sent to the Honorary Secretary at any time up to 20th December, and it is hoped that the function will be well supported.

Past, as well as present Clubs' Union members will be most welcome and it is hoped that many of them will take an opportunity of renewing contacts with the Hospital.

Yours, etc.,

P. G. LARGE,

Honorary Secretary,
Clubs' Union Councll.

November

ACADEMIC

		Exhibition. Ear, Nose and Throat Department, Out-Patients' Department. " Carcinoma of the Larynx."
		Exhibition. Surgical Department. " The Maintenance of Nutrition."
5th	1.00.	Mr. Reading. Clinical Lecture. " Carcinoma of the Larynx."
	5.00.	Department of Surgery. Film. " Appendicectomy by the ' Gridiron ' Approach." Clinical Theatre.
8th	1.00.	Sir Heneage Ogilvie. Clinical Lecture.
	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
9th	1.00.	Dr. Mann. Clinical Lecture. " Bronchial Asthma."
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
10th	10.00.	Mr. R. S. Handley, Middlesex Hospital. Surgical Departmental Round. Clinical Theatre.
12th	12.00.	Mr. S. H. Wass. Dental Clinical Lecture. " The Recognition of Malignant Disease in the Mouth." Anatomy Theatre.
	1.00.	Dr. Rink. Clinical Lecture. " The Heart and Anæsthesia."
	4.30.	Guy's Students' Association. Presidential Address. Mr. Patrick Clarkson. " Technicians and Technique in Surgery with a special note on contributions from Guy's."
14th	4.45	Guy's Science Club. Dr. J. Joseph and Mr. A. Nightingale. " Electromyographic Studies of Posture." Staff Common Room. (Tea 4.30.)
15th	1.00.	Mr. Lawrie. Clinical Lecture.
16th	1.00.	Dr. Kauntze. Clinical Lecture.
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
19th	1.00.	Mr. Doherty. Clinical Lecture.

SPORT

10th	Rugby 1st XV *v.* Birkenhead Park. (Birkenhead.)
	LONDON COUNTIES *v.* SOUTH AFRICA. (Twickenham.)
14th	Rugby 1st XV *v.* Cambridge University. (H.O.P.)
17th	Rugby 1st XV *v.* Rosslyn Park. (H.O.P.)
	Rugby "A" XV *v.* Rosslyn Park "A". (Richmond.)
	Rugby Extra "A" *v.* Rosslyn Park Extra "A". (H.O.P.)
	Rugby Wanderers *v.* Rosslyn Park " B ". (Richmond.)
19th	Rugby 1st XV *v.* University College, Dublin. (H.O.P.)

Sport and Hospital Information, etc.

APPOINTMENT VACANT

There is a vacancy for a **Part-time Assistant in Research,** to work under the supervision of Dr. T. H. Hills and Dr. C. B. Allsopp in the Departments of Diagnostic Radiology and Physics, to investigate the quantity of X-radiation received by patients during diagnostic procedures. The assistant appointed will be expected to devote up to three-quarters of his time to research and to study for a Diploma in Medical Radiology. Salary, according to seniority and qualification, on the basis of a maximum of £775 per annum for full-time work. Applicants are asked to communicate at once with Dr. Allsopp who will supply further information.

DENTAL SOCIETY

Officers and Committee for 1951-1952

President :	Mr. W. A. Vale
Vice Presidents :	Mr. Bulleid Mr. McLean Mr. Malleson
Hon. Secretary :	G. E. Wade
Hon. Asst. Secretary :	G. Pearson
Hon. Treasurer :	H. C. F. Meyer
4th Year Representative :	R. G. Kettle
3rd Year Representative :	A. G. Orme
2nd Year Representatives :	D. Middleditch D. J. Baynon
Hon. Dance Secretary :	M. Tyrell
Hon. Asst. Dance Secretary :	J. Cautley
Hon. Dinner Secretary :	P. Warren
Hon. Asst. Dinner Secretary :	J. Cranfield
B.D.S.A. Representative :	J. Cautley

HOCKEY

Guy's *v.* Sittingbourne

At Sittingbourne. Result—Won 8—1

27th October, 1951

In this game, good combination by the forwards was the feature, serving to offset a certain inadequacy in the defence : the gap between the forwards and defence was many times too apparent, but fortunately was largely covered by the fine work of the inside forwards.

Following a brisk start, Guy's were quickly put in the lead by Hall. Sittingbourne, however, equalised alarmingly soon after, more the result of our own faulty clearance, and it became clear that what our opponents may have lacked in speed they made up for in intelligent positional play and marking. Guy's had difficulty in establishing a good attack, which was further hindered by insecurity in the defence, where the steadiness of Robinson was most welcome. Slowly, Guy's gained confidence, and by half-time led by 3–1, other goals having been added by Duckworth and Blake.

Hitherto the game had been very open, but with good interpassing among the forwards, together with swinging passes from the defence, more goals were added, including a good one from Millar, scored from a penalty corner. Later, Guy's supremacy was safe, mainly through greater speed and thrust on the part of the forwards, notably Blake, whose duels with the Sittingbourne goalkeeper were mostly fruitful. Goals were scored by Blake (3), Hall (2), Millar, Duckworth, plus one " own goal."

Team : C. Bishop ; N. J. Knight, N. Parker ; C. F. M. Robinson, D. Linahan, W. R. O. Eggington ; D. V. Duckworth, I. J. Millar, D. E. Blake, J. J. Hall, R. Sandfield.

20th October, 1951

Results

Guy's 1st XI *v.* Romford

At Romford. Won 7—0

Guy's 2nd XI *v.* Romford

At H.O.P. Won 3—2

Guy's 3rd XI *v.* Romford

At H.O.P. Lost 0—6

Guy's 4th XI *v.* Romford

At Romford. Lost 2—3

27th October, 1951

Guy's 2nd XI *v.* National Provincial Bank

At H.O.P. Result—Lost 1—6

Guy's 3rd XI *v.* Hay's Wharf

At New Eltham. Result—Won 4—2

ATHLETIC CLUB

At the Annual General Meeting of the Athletic Club held on October 16th, the following Officers were elected for the season 1951-2 :—

President :	Mr. R. S. Lawrie.
Captain :	E. N. McKenzie.
Hon. General Secretary :	D. Parrott.
Hon. Sports Secretary :	J. V. V. Lewis.

CHESS CLUB

Guy's *v.* The London Hospital

Result—Lost 1½—4½

CHANGES OF ADDRESS

C. N. d'E. Eastes, M.B., B.S., 50, Owlstone Road, Cambridge. Tel. : Cambridge 57083.

J. W. Finnemore, L.D.S., R.C.S., (Retired), " Thorndale," Private Bay Adelaide, Cape Province, S. Africa.

A. E. McLauchlan, M.B., B.S., 62, Belvedere Court, Upper Richmond Road, Putney, S.W.15. Tel. : Putney 5801.

P. B. Smith, L.D.S., R.C.S., 12, Dickerage Road, Kingston-on-Thames, Surrey. Tel.: Kingston 0416.

BIRTHS

BUCKLEY.—On October 9th, 1951, to Joan (née Lucas), wife of John H. M. Buckley, M.B., B.S.—a daughter (Susan Joan).

JACKSON.—On October 1st, 1951, at the David Bruce Military Hospital, Imtarfa, Malta, to Joan, wife of Surg.-Lt. M. C. H. Jackson, M.B., B.S., R.N.—a daughter (Caroline Eleanor Margaret).

RUTTER.—On October 21st, 1951, at Nuffield House, Guy's Hospital, to Mary (née Tudor), wife of C. Rutter, M.R.C.S., L.R.C.P.—a son (Melvyn Tudor).

SMITH.—On June 24th, 1951, at Nelson Hospital, Wimbledon, to Patricia (née Dickinson), M.S.R., wife of Peter Bryan Smith, L.D.S., R.C.S.—a brother for Colin (Philip Richard).

MARRIAGE

LOMMERSE—SNALE. — On September 15th, 1951, at St. Mary's Church, Lewisham, P. G. W. A. Lommerse, M.B., B.S., to Ira Snale of Alleyn Park, East Dulwich.

Eds. R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1652 17*th November* 1951 *One Shilling*

PASSIM

"REGARDING this subject of Rest in its highest, closest and best relation to mankind, and looking at it by the aid of my feeble penetration, I would, in all humility, remind you that when God ordained that man should live by ' the sweat of his face ' as a punishment for his disobedience, it pleased Him in the plenitude of His unspeakable benevolence, to permit man's fatigue and temporary exhaustion to be followed by his greatest earthly solace—the blessing of rest and repose, by calm and peaceful sleep ; a blessing which should be the immediate reward of his labour." So wrote John Hilton ninety years ago. Since that time the therapeutic value of Rest has never been callenged yet we sometimes wonder whether patients are enabled to receive as much peaceful rest as they need.

It is inevitable that patients should be disturbed from time to time for necessary medical and nursing attention. It is reasonable for them to be disturbed occasionally for teaching purposes. The ordinary noises associated with any ward in any hospital must also occasionally disturb them. Yet beyond these are many things, often small things, whose removal would contribute much to their comforts. An article written by a doctor-patient on another page mentions some. One only has to be in a ward for a few weeks to be reminded of many others : the clanking of oxygen cylinders dumped in the park : the horrid rattle of the mortuary trolley—a sound known to all night staffs and many patients and one surely worth abolishing : the clanking and banging of milk cans outside the kitchens early in the morning : the metallic rattle of breakfast trays being laid in the ward by night staffs : the tank-like rumble of the portable X-ray machine : discussions by take-in firms in the wards at night—add to all these the noise inseparable from London Bridge Railway Station, and it is not surprising that quantities of sleeping draughts are consumed every night in the Hospital. In mentioning all these we criticise many, but condemn no one, but if everyone from the heavy heeled dresser to the " banger of lift gates " would imagine his noise occurring at the foot of his own bed, he might well go about his business more quietly.

" Pain " is a symptom often difficult to understand. " Rest " is a treatment as simple as fresh air. It ought to be as readily available.

Readers of our correspondence columns in the last issue of the *Gazette* will have read of the Clubs' Union Dance which has been organised to take place on 11th January, 1952. The first of its kind, the Dance is deserving of generous support. In the past Guy's students—unlike those of several other London hospitals— have never had a Ball of their own. The Students' Union has done excellent work in organising less ambitious projects but whilst the Residents, the Dental Society, the Nurses, the Physiotherapists, have all had an annual ball, no comparable event has been held by the students. We hope, therefore, that this will be the first of many such dances, and that its success will merit the support given the venture by the members of the staff who have promised to attend. Double tickets at £3 3*s*. each may be obtained from :—

Mr. N. L. Eckhoff, Mr. F. R. Kilpatrick, Mr. T. L. T. Lewis or Mr. P. G. Large or from Mr. Dodshon.

We have just learned, and record with great regret, the sudden death on Tuesday, 13th November, of Col. E. B. Dowsett, D.S.O., T.D., F.D.S., M.R.C.S., at the age of 76 years. A distinguished dental surgeon and a revered gentleman, he was at the time of his death the President of the British Dental Association and a Governor of Guy's Hospital Dental School.

The Physical Society

A TRADITION dating back to the eighteenth century was upheld on November 8th, when the Physical Society entertained at a Clinical Meeting thirty members of the St. Thomas's Hospital Medical and Physical Society, whose number included three members of the staff, Mr. Boggan, Dr. Anderson, and Dr. Cadman. Sixty-five Guy's men attended and the meeting was ably organised by the Presidents, Mr. Calne, Mr. J. A. Smith and Mr. Sonnenfeld, who were assisted by a large band of willing helpers.

Four cases were shown in the preclinical classroom and there was a quiz consisting of X-rays, photographs and bottles. This provided enthusiasm and bewilderment in equal proportions and revealed that members of both hospitals possess remarkable powers of imagination.

After supper the cases were discussed in the spit. Mr. Hamilton presented a case of parietal lobe tumour in a man whose symptoms had led in the first instance to his admission to a mental hospital. In the course of a few months the patient had lost the powers of sensory discrimination in his right hand which had later become weak and subject to Jacksonian seizures. At the same time he had begun to experience headaches and visual disturbances ; he had lost the power to read and to write anything but his name, and had gradually become increasingly demented. After some discussion about the physical signs Mr. Hamilton gave an account of the methods employed in the investigation of cerebral tumours which made even neurosurgery sound easy.

Mr. Cremin then gave the history of a woman of 50 who had suffered for a year from recurrent red painful nodules in the skin, accompanied by lassitude, slight breathlessness and occasional fever. The diagnosis of sarcoid was made by many members, and this was confirmed by the biopsy report. Dr. Anderson remarked that some of the lesions had occurred in the bend of the elbow at sites of previous venepunctures, for she had been a blood donor. He recalled other cases in which minor trauma had been a factor in determining the site of the lesions.

Mr. Tomlin discussed the case of a man of 35 who for nine years had had bouts of severe headache and gradual enlargement of the jaw and hands. More recently he had suffered from depression and muscular weakness. The diagnosis of acromegaly was readily made by members. Mr. Boggan commented on the treatment of the disease, urging that surgery should not be invoked unless blindness was threatening.

Finally, Mr. Palmer presented the case of a man of 62 who had suffered from a deep but transient jaundice without any pain and preceded by striking anæmia and loss of weight. This case provoked the best argument of the evening, and carcinomatosis, infective hepatitis, gallstones, and cirrhosis all had their ardent advocates.

Mr. Mattingsley of St. Thomas's concluded a successful evening with a graceful speech.

The next meeting will be held in the spit at 8.0 p.m. on Thursday, December 6th, when Mr. Farrell and Mr. Turk, who have been awarded the Physical Society's Beddard and Laidlaw prizes for their essays on The Surgical Significance of Pancreatic Disease, will discuss this subject. The Presidents are Miss Bellam and Miss Brett, and Mr. Blackburn, who judged the essays, has kindly consented to be present.

Dentistry in America

By W. A. VALE, B.D.S.

The Presidential Address given to the Dental Society, Guy's Hospital, October 10th, 1951.

LADIES AND GENTLEMEN.—Firstly I must thank you all for the great honour which you have bestowed on me in making me your president for this year. I will try to do my duties as you would wish, but depend, of course, on your officers giving me adequate guidance—on which I am quite confident I can rely. I feel quite embarrassed to find myself following so eminent a member of our profession as Mr. Bulleid in this office and trust that you will forgive my shortcomings in view of my very limited experience—also, of course, I have no specialty into which I can delve to confuse, mystify or awe you. The subject in which I am engaged is the humdrum backbone of dentistry—operative dentistry, conservative dentistry or perhaps the best descriptive name is restorative dentistry. To some the most tedious of all branches of our subject, but none the less to others a reasonably interesting one. We should remember that probably in the average good general practice, about two-thirds of our time will be spent in this field.

Last winter I was most fortunate, following the generous award to me of the Guy's Travelling Scholarship, and I might add, further generous assistance on the part of the Dental Council of Guy's, to be able to make a trip to the U.S.A. The purpose of this visit was to enable me to try to learn something about the subject which I had been trying to teach in the course of my duties here and also to visit several of the American schools and to obtain ideas on their teaching methods which might be useful, or otherwise.

I therefore planned my trip in two parts. The first comprising four months was spent in two schools where I attended definite courses. The second part of the time, about two months, was spent in rather hurriedly visiting schools and trying to absorb ideas about teaching, planning and arrangement of their courses in general.

My first school was at the University of Michigan in Ann Arbor, a beautiful rural town about 30 miles from Detroit (the motor city of America). An idea of the relationship between the university and the town (or city) may be judged from the fact that the fixed population of Ann Arbor is about 30,000 and there are 23,000 or 24,000 students at the university. One's first impression is the magnificence of some of the buildings, which mostly result from bequests and donations from individuals and business firms, but also from large grants from the State of Michigan.

The Dental School is comparable with ours, in annual entry, 85 a year, but in addition there is a wonderfully equipped graduate and post-graduate institute in an adjoining building. This was built and is partially financed from the Kellogg Foundation—a fund which has been set up (from the proceeds of the sale of caries-producing breakfast cereals) to further medical and dental education and medical and dental treatment of children. In this school I attended courses in crown and bridge prosthesis, operative dentistry and endodontia (which is their nice-sounding name for the treatment of pulpless teeth). Most of my work in crown and bridge and operative dentistry was done in one of the beautifully equipped laboratories, where they believe in, and are financially in a position to try out, anything new which comes along. I was also able to spend some time at lectures and watching practical work done by their undergraduate students. It is a hard school—by that I mean that little mercy is shown to the student who happens to forget or lag behind or is careless. He is allowed, frequently, to complete work from a faulty impression—just to teach him to be more careful at the impression stage next time. There were many examples of that type. Their rules of procedure in the laboratories and clinics would disturb some of the people here I think. Their system of charting and signing up is also of a complexity to really stagger the hardened. For example a complete chart—two sides about the size of our Conservative Room chart, must be completed for each tooth on which root canal treatment is contemplated. Separate charts are used in each department and these are filed jointly, which of course is an excellent idea, as it enables more co-operation and liason between the departments to be obtained.

As regards the teaching, their preparations conform to the orthodox, but modifications have been made to enable the best results to be obtained from modern materials. For instance in their Class II inlays, they accept the fact that the average practitioner is going to work by the indirect method and hope for a finished, polished casting from his technician which will require little adjustment or time at the cementing stage and so about 75% of their Class II inlays (that is, the students' inlays) are made indirectly. They use reversible hydrocolloids extensively for impressions for both single and multiple inlays and also for bridges. In view of this swing to the indirect method, the classical black cavity form has been modified by judicious discing or slicing of the teeth to reduce overhanging and undercut bulges on the proximal surfaces and so facilitate accurate impression taking. This in spite of the fact that so many of their impressions are taken in a very good elastic material—hydrocolloid.

The use of hydrocolloids for inlay and bridge impressions has not been accepted by all, however, and some still adhere to the composition impression and metal die, usually copper electroformed dies with a fusible metal core. This undoubtedly allows a better and fiercer treatment of the edges of the casting on the die than with the hydrocolloid impression where stone dies are the only ones normally obtainable. A new ceramic material (Durodie) for the dies made from hydrocolloid impressions was being tried in a small way, but it seemed to call for considerable skill in its use and the technique was rather elaborate.

In view of the thinner castings which naturally follow in the slice preparation, harder golds are used for inlays than usual. I was pleased to see that great attention was paid to the contouring of the surface of restorations, and apart from the occlusal contours (that is, fissures, spill ways, marginal ridges, and so on) and the proximal area, the deflection curves of buccal and lingual surface received special attention as important factors in the prevention of gingival irritation.

The preparation of abutment teeth for bridges was very orthodox, with great attention to æsthetics—the idea that the Americans don't mind a great deal of gold showing on anterior teeth was not borne out in this school. Study models were always taken prior to the construction of a bridge and after carefully marking on the model the extent to which gold might be carried, this was copied when work was carried out in the mouth.

Not many pinlays and pinledges were prepared but where they were, the pins were usually cast, from acrylic instead of wax patterns. These pin patterns are prepared to fit the hole made by a 700 bur and, of course, gave a beautifully smooth pattern from which a very nice casting resulted—acrylic, of course, burns out in the same way as wax on heating.

Porcelain facings were used almost exclusively on bridges, but of course they have a wide range of types of facings and pontics available so that it is much easier there than it is here. Acrylics were used a little, but seemed to be on the increase.

Far more extensive bridges were constructed by students than is the custom here and there is no doubt that, if properly made, they give very satisfactory service.

Self-polymerising acrylic restorations were used in the school, but the material was still regarded as in an experimental stage and was not considered to have reached a state of perfection by any means—of course, a great deal was being used in practice, largely as a result of public demand. The publicity given to some of the new materials and apparatus through the lay press is far greater there than here, and such periodicals as the Readers' Digest can have a terrific impact on the profession through the public. The new Airbrasive machine is the latest example of painless cavity preparation in dentistry. Incidentally, I saw these machines in use and actually handled one. It is a quite extraordinary sensation, to watch tooth substance disappearing at the touch of a foot control without any tactile sense to the hand. There are considerable limitations of course (and, by the way, it is not entirely painless) but for bulk removal of hard dental tissues such as breaking through thick marginal ridges it is quite spectacular. There may yet be snags though, and I for one would not like to work constantly in an abrasive dust-laden atmosphere every day. There is a suction apparatus (like a vacuum cleaner) attached to the machine, which is supposed to remove the abrasive after use, but the fact remains that in a room with about a dozen of these machines in use, it was like walking through a sand pit, after an operating session. Experiments were going on when I left to see how the health and well-being of animals was affected by being brought up in an aluminium oxide dust-laden atmosphere—the result will be interesting.

The course in root canal work at Ann Arbor was most impressive in thoroughness and, perhaps as a natural sequel, in the results obtained.

All the work is controlled bacteriologically—that is to say culture material was obtained from the canal at the commencement of each visit, and until two successive sterile cultures were obtained no filling was allowed. It was interesting to note that from a large number of cases investigated and treated, it only required an average of 3·06 treatments to obtain these two successive sterile cultures. After satisfying themselves of the sterility of the canals, filling is completed using silver points with a very little paste sealer in posterior and lower anterior teeth and compressed gutta percha and sealer in upper anteriors.

The sealer is largely zinc oxide and oil of cloves, but to the powder is added rosin, precipated silver and thymol iodide, and to the liquid, some Canada balsam. The success or otherwise of the root filling, they claim, depends almost entirely on obtaining a really good seal, particularly in the apical third or half of the canals. The filling is carefully controlled by radiographs.

The fact that an X-ray shows periapical changes (if of reasonable dimensions) has little attention paid to it at this stage. Long series of cases are shown which illustrate the fact that following two successive sterile cultures and the insertion of really good root canal fillings and given time, say 3–12 months, most of the abnormality at the periapex resolves and only very few require root curettage or resection.

Another point of interest is that the difference in the percentage of positive cultures from the canals at first visit where X-rays show abnormality at the peri-apex and of those which appear normal is really very little. Normal appearance 52·3% ; abnormal appearance 61·3%. There is a difference, but I think, it is sufficiently small to emphasise that the radiograph will not (as a single film and not one of a series) give us the clue to whether or not our canals are infected. Ah yes, you may say, but the cultures are not from the canals and the radiograph shows the periapical tissues. Well, about three years ago a series of cases was investigated at Ann Arbor and deliberate perforation of the apex was made in order to obtain material for culture from both the canal and the periapical region and the figures were apparantly almost identical.

Where large areas of rarefaction are seen, often cystic in nature, conservative treatment is the rule, and small openings are made into the cavity which are kept open by removable soft rubber plugs. The patient is instructed in the manner in which these are removed and re-inserted and carries out regular syringing of the cavity, perhaps over quite long periods of time, but with almost invariable success. Ultimately the canal is filled and curettage of the small residual area or sinus is carried out.

I think that is enough about Ann Arbor except to say that the laboratories which are provided for the students at all stages of their course, would make you all green with envy. Every student doing clinical work has a definite place in a well equipped laboratory to which he can go to do his mechanical work and I think this played quite a big part in enabling them to turn out such a high standard of work.

The kindness and hospitality of the staff there was my first taste of American hospitality and it really is on a generous scale.

From Ann Arbor I went to Chicago, to the Dental School of the University of Illinois. I spent a month there, mostly in Dr. Tylman's department, where I thoroughly enjoyed myself. I did not attend a fixed course, but in spite of the fact that Tylman is a very busy man, he kindly gave me a great deal of his time and a lot of information and help. Here again there was a very beautifully equipped laboratory in which I worked and he and his staff gave me every possible assistance. He has a staff of about four half-time people and they seem to spend about two-thirds of their time teaching and one-third of their time making teaching models for the department. This system must have been going on for a very long time, judging by the enormous quantity of models they have made. Most of the models are 2½ natural size and the gold used seems quite fabulous in quantity.

During my stay in Chicago, which is a very large and very dirty city (and I might say it was quite cold at times, with temperatures of 15° Farenheit below zero) there was held the Chicago Mid-Winter Dental Meeting. This is quite an occasion and is attended by some 8,000 or 9,000 dentists from all over America. It is held in the largest hotel in the world (3,000 rooms) and a vast programme of lectures and demonstrations is staged. Of course the trouble is that there is too much going on to see anything like all of it, but it was very interesting. During the week-end before the big meeting, most of the various specialist organisations such as the Academy of Restorative Dentistry and the Society of Endodontists meet. Here the specialists in the various fields gather among themselves and there is a really fine show put on.

The social side of the meeting is quite hectic and it was a very tiring week. Several people took me out to see the sights of Chicago, but I am sure you would not be interested in that sort of thing.

Incidentally, following the big meeting, the University of Illinois Dental School put on a Television Course at their school. The subject was Occlusion in Periodontal Practice and they collected a very eminent group of speakers, to cover the subject from various aspects, anatomically, pathologically, and of course, remedial. About 150 people attended this course (of two days) and I believe there were representatives from about 43 states and about 26 different countries present. Their method of presentation is very good and several rooms were used, each with three 16-inch screens. Vision was good and it is certain that only a very few would have been able to see what was going on without the aid of T.V.

I left Chicago in February and then started my journey round a number of schools, Indianapolis, Columbus, Ohio (where they have a beautiful new school which was opened in January of this year), Pittsburgh, Temple and Pennsylvania in Philadelphia, and then on to Boston where I stayed with Dr. Goldman of periodontia fame. I spent five days here and we left the house each morning at about 7.30 a.m. and arrived back about 11.0 p.m. after very full days. I might mention that nearly all the schools commence their day at 8.0 a.m. and not 9.0 a.m., and most practitioners start at the same time. I visited the Beth Israel Hospital (where Goldman spends half his time and where he has an incredibly large collection of pathological specimens), Harvard Dental School, where they have an entry of only about 14 a year, Tufts where they take 90, and several private practices.

It was Goldman and one of his associates, Lewis Fox, who finally convinced me that there is something big in this subject of bite rehabilitation—to that should also be added, fixation of teeth. Lewis Fox showed me some quite amazing results which he has obtained by the use of full jaw splinting and fixation of the teeth, with carefully re-organised occlusion and elimination of lateral stresses on the teeth. He says he is really only interested in taking on cases where clearance has been decided on by others as the only form of treatment and his results are the finest example of true restorative dentistry which I saw. I sincerely hope that he will be over here next summer at the F.D.I. Congress.

I then returned to New York for about 10 days and, whilst waiting to leave, saw some of their Easter Festivities. I was able to see a little of New York and also visited Columbia University Dental School and then set foot aboard the Queen Mary and so home again.

I apologise for this being a rather disjointed talk, but in conclusion I would like to say that I did see some examples of wonderfully executed dentistry in America—I was also shown some examples of really bad dentistry. A large number of the public demands good restorative dentistry and naturally the supply is created for them and that section of the public has to pay good fees for their work. On the other hand there are parts of the country where the demand for dentistry is poor and there is a gross insufficiency of dentists. There was a very obvious anxiety on the part of those people who were giving a high class dental service to their patients that before long, they might be subjected to the restrictions and frustrations of a health service, in which the reward for quality might ultimately be poverty.

On being in the Ward

By P. HUME KENDALL

TRAMP, tramp.

Tramp, tramp . . .

Went the heels of the dresser as he strolled down the ward, waking from peaceful slumber the ill patients on both sides. Little did he realise that the noise made by his heels, which he had so adamantly refused to get capped with rubber, caused more than one ill patient to be woken from that sleep which was so essential and necessary.

" Oh ! That doesn't matter, I can walk quietly enough."

But dressers on " take-in," housemen on night rounds and even highly respectable registrars are all frequently delinquents in this respect. No one ever complains, but whilst lying in a hospital bed one realises that such a little care could save so much anguish. The lady students with high heels that are fashionably leather tipped might well remember this.

" Washing time ! "

How awkward are those little drips which sneak down behind the towel and trickling over the chest and across the tummy, fall, permanently moistening the bed clothes in the most uncomfortable places.

Oh ! The uncertainty and trepidation of wobbling on and off bed pans with all its concomitant risks and dangers.

How very much more suffering may washing in bed and the command, " He is not to go out to the toilet," cause when compared with the faint therapeutic disadvantages but untold pleasures of actually going out to the bathroom.

First to one side—then back to the other, forwards and backwards—no the centre is more comfortable. Round and round the air ring wobbles, the patient proving it to be the blessing in disguise it really is. It keeps those " points of contact," so easily made sore, lightly air borne and continuously on the move.

Pills . . .

Countless times a day they come in their legion. Sweet pills, sour pills, hard pills, soft pills, black pills, white pills, little multicoloured pills—they come off trolleys, in spoons, in packets and by hand. Fortunate is the patient who is not visited more than six times a day with pills.

Blindly they are swallowed—blindly they appear to be given.

What are their effects ?

No one knows—till the morrow.

None may ever know !

They are accepted as even are the very beds in the Ward.

" Just a minute old chap—shan't be a second, just a quick examination." These were the dresser's words that awoke a sleeping patient three days after his admission following a serious accident not long ago. This does not seem bad at first sight, for patients must be examined but as it occurred at a quarter to nine at night on a day when the patient had been woken at six following a night of hardly any sleep, it seemed a little hard. The blind faith of " It's a teaching hospital, everything must be all right," seems to carry through students and patients alike. But perhaps a little more consideration . . . ?

" Is there anything you want ? "

Can too much be said for that magnificent unpaid band of voluntary workers who provide the flowers with the friendly messages, the library books and the domestic " nick nacks " that are brought around the wards during the week and that help to relieve the tedious hours ? Can there be more noble a deed than to give up one's day to these menial tasks. But they are remembered—as a bright shining face, a kindly hand or perhaps as just " the woman with the flowers."

Into the corner of one's eye a screen appears.

What boundless terror is about to overcome the body that it might not be seen by one's fellow patients ?

Secluded from one's fellows for the least act or deed, one is alone, lost in the midst of a wilderness, for communication by shouting is forbidden by all codes of morals.

Stitches out today.

A cold dread creeps over one. Those thoughts of anguish that have been hidden in the back of one's mind for some days suddenly peak to a climax.

A sweat bathes the body as the screens are set out, the instruments of torture brought to hand—then suddenly the tormentor appears. But no—suddenly through the haze comes a voice, " all over." Where was the pain and why the worry ?—but " ouch ! That ether to get off the plaster marks is cold." And up to tell one's friends—" No, it didn't worry me at all old chap."

" A bond of fellowship between patients." Does it exist ?

One has only to think of the numerous Guilds of Ex-patients that appear in connection with the many hospitals throughout the country.

But is there something closer than this, an entity less well defined, a more intimate relationship, for very tender inquiries are made both whilst in hospital and later in out-patients from patients to their near bed mates. And do they plot together to hide things from the sisters and housemen ?

. . . One sometimes wonders . . .

Guy's Diary

November		**ACADEMIC**
		Exhibition. Surgical Department. " The Maintenance of Nutrition."
		Exhibition. Ear, Nose and Throat Department, Out-Patients' Department. " Carcinoma of the Larynx."
19th	1.00.	Mr. Doherty. Clinical Lecture.
22nd	12.00.	Mr. A. Bulleid. Dental Clinical Lecture. " Gum Conditions and their Interpretation." Dental Theatre.
23rd	1.00.	Dr. Hampson. Clinical Lecture.
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
24th	10.00.	Department of Surgery. Clinico-Pathological Meeting. Clinical Theatre.
26th	1.00.	Dr. Carter Braine. Clinical Lecture.
28th	12.00.	Mr. W. Bentley Purchase. " Some Legal Aspects of Dental Practice." Anatomy Theatre
30th	1.00.	Dr. Douthwaite. Clinical Lecture.
	2.15.	Department of Medicine. Combined Round. Preclinical Classroom.
December 3rd	1.00.	Mr. Batchelor. Clinical Lecture.

November		**SPORT AND SOCIAL**
24th		Rugby "A" XV *v.* London Irish "A". (H.O.P.) Rugby Extra "A" *v.* London Irish Extra "A". (Blackheath.) Rugby Wanderers *v.* London Irish " B ". (H.O.P.) Rugby " B " XV *v.* London Irish Extra " B ". (Sunbury.)
30th	3.00— 6.00.	Sale of Work in aid of Royal College of Nursing Educational Fund. Nurses' Home. Guy's Hospital.
December 1st		Rugby 1st XV *v.* Coventry. (H.O.P.) Rugby "A" XV *v.* Coventry Extra 1st. (Coventry.) Rugby Extra "A" *v.* East Grinstead. (East Grinstead.) Rugby Wanderers *v.* Old Masonians "A". (Epping.)
	3.00— 6.00.	Sale of Work in aid of Royal College of Nursing Educational Fund. Nurses' Home. Guy's Hospital.

Dr. E. R. Churchill.

On Monday, November 5th, Guy's had the pleasure of a visit from Dr. E. R. Churchill, Professor of Surgery in the University of Harvard and head of the Department of Surgery at the Massachusetts General Hospital. It was a notable occasion and amongst those who attended the teaching round in the Clinical Theatre which Dr. Churchill conducted were Sir Heneage Ogilvie, Mr. Atkins, Mr. Brock, Dr. Rink, Mr. Lawrie and Mr. Glover. Mr. Atkins, in introducing Dr. Churchill, referred to the latter's outstanding position amongst present-day surgeons, and to mark the occasion of his visit presented him with a copy of the recently published History of Guy's. At the conclusion of the teaching round Sir Heneage Ogilvie thanked Dr. Churchill in the following address :—

Ladies and Gentlemen.—Mr. Atkins has given me the privilege of thanking Professor Churchill on your behalf for giving up an afternoon of his very busy programme in London, to come down to Guy's and talk to us. I do thank him most sincerely, but I am sure that the rapt attention with which you have listened to him and your applause afterwards have already told him as much. I feel bound at the same time to tell you how privileged you are to have had this visit, to have met a man of Churchill's standing in the world of surgery, and to have heard his views.

Fame in surgery has many gradations. Some men are known in their own hospital but little outside it, some have a reputation in their own town, some become national figures, a few become international figures. If they are loved as well as honoured, they become known by their Christian names. But the highest honour that a surgeon can attain in his generation is to be known universally by a name bestowed on him by those who work under him, a name unrelated to that given him by his godfathers and godmothers at his baptism. Lister, Macewen, and Moynihan were giants in their time, yet I have never heard it recorded that they were known as Joe, Bill, or Berkeley. My loved chief, on the other hand, Ernest Cranmer Hughes, was always known as " Joey ", and one of my colleagues, who captained the Irish fifteen for several years, is " George " to all Guy's men, though his initials are W.D. So in America ; one of Churchill's colleagues, Arthur W. Allen, late President and for some years Chairman of the Board of Regents of the American College of Surgeons, is " Jimmy " to the thousands of Fellows of that College. You have, therefore, some indication of where Churchill stands among the surgeons of the New World, when I tell you that Edward R. Churchill is known everywhere as " Pete ".

When I made my first visit to America in 1937, he was already famous. I landed in Boston, and heard immediately of the brilliant young man with the fair hair and the research record, who had taken over the chair of surgery in the University of Harvard and was breaking fresh ground in thoracic surgery. I met him, watched him, heard him teach, and understood why his reputation stood so high. But it is a long way from the brilliant professor of 1937 to the acknowledged leader of today. How has Churchill established for himself a commanding position in American surgery ? I can think of three general reasons.

First, he has never shown the tendency, so common among the brilliant, to follow one line with increasing enthusiasm to the exclusion of others. He has remained a research worker, and his training has enabled him to keep in touch with all the important work that has been done in his department, to criticise, to understand difficulties, sometimes to suggest the way they might be solved ; but he has interpreted research in its true meaning of constant enquiry, and not as the art of using complicated instruments and obscure phraseology. His tools have not been merely the test tube, the kymograph and the Geiger counter, but he has constantly returned to those more important tools, the eyes, the ears, and the fingers.

Secondly, though he is a chest surgeon, he has never been a Thoracic Surgeon in inverted commas and with capitals. He has kept in touch with the whole range of general surgery and shown his ability to handle, discuss and illuminate many of its branches. Like our Brock, he has used chest surgery as a vehicle for teaching general principles.

Thirdly, he showed during the late war a breadth of vision, a realisation of the shattering simplicity of the pathology underlying the reaction of living tissues to trauma and infection, and an ability to expound, that were of the greatest service to his countrymen and the Allied cause. Coming to North Africa, as he did, a man with an established reputation, he had the greatness to realise that in this new school he was a new boy. For months he wandered and observed. He watched men wounded under different conditions and by different weapons, he studied the methods of treatment and their results, he collected his own facts and drew his own lessons. Then only did he start to teach others. He has produced a series of articles whose soundness and whose clarity remain models to all future war surgeons.

I know you will agree with me that we have been very fortunate to have a visit from Pete Churchill, and I am certain that you will all carry the memory of this afternoon with you when you go out to work for yourselves.

XIth International Dental Congress

DENTISTS, it would appear, have developed to an outstanding degree the faculty of organising successful clinical conferences. What is more, to obviate the boredom of professional pre-occupation on such occasions, they invariably see fit to introduce at least a modicum of social delight into their otherwise purely scientific and practical deliberations. Those acquainted with the " open day " held at Guy's each year, culminating in the Dental Dinner, know just how enlightening and pleasurable such functions can be.

Now, it seems, there is to be held in 1952 an International Dental Congress on a hitherto almost unprecedented scale. This affair, sponsored by the Federation Dentaire International, will take place in this country from July 19th to 26th, at the invitation of the British Dental Association. Arrangements are already proceeding at the behest of a committee presided over by Dr. E. Wilfred Fish, with Mr. J. H. Leatherman as the Honorary Secretary. Representatives from at least thirty countries are expected to attend, including a large delegation from the United States. Following the official opening at the Royal Festival Hall on Saturday, 19th July, the official programme will include :—

(i) Twenty reports by notable members of the dental profession.
(ii) Three symposia on orthodontics, full dentures and control and prevention of dental caries for the future.
(iii) A discussion centre for dental research workers.
(iv) Over a hundred demonstrations.
(v) A scientific exhibition.
(vi) Television and a continuous film show.
(vii) An oral hygiene exhibition open to the public.
(viii) Special clinical meetings at some of the dental schools in London.
(ix) A dental and allied traders' exhibition.

In addition, social opportunities will take the form of :—

(i) A grand ball at the Albert Hall.
(ii) A congress banquet at Grosvenor House.
(iii) Numerous official receptions.
(iv) Conducted tours to Oxford, Cambridge and other historical places in and around London.

Clearly, the success of this venture depends initially on the support received from members of the dental profession in this country. Active membership is therefore invited, with associate membership for such people as members of a dentist's family, dental and medical students, ancillary workers, technicians, and so on. Enquiry is invited and enrolment forms are obtainable from the Honorary Secretary, XIth International Dental Congress, 13, Hill Street, London, W.1 (Telephone : Grosvenor 3020).

Memories of Guy's

By A. R. THOMPSON, Ch.M., F.R.C.S.

Consulting Urologist, Guy's Hospital

IV. THE OLD MEDICAL SCHOOL LIGHTS

(Continued)

WE must now leave the Hospital and enter some of the subsidiary buildings in order that my readers may be introduced to some of the leading lights of the Medical School.

There were several interesting men teaching in the various departments of the Medical School when I first came to Guy's. Reinhold, the lecturer in physics, was also instructor at the Naval College at Greenwich. He was a fellow of the Royal Society and, I am told, a capable teacher. Wade, the professor of chemistry, later became a fellow of the Royal Society as well. His attitude to Rugby football was, at one time, distinctly adverse. In 1898, however, some very good students came from New Zealand, who were not only excellent at their work but were very fine footballers in addition. These men were able to demonstrate to Wade that they could combine play and work with advantage to both subjects, as well as to the men themselves. Under their influence, Wade became an ardent supporter of games at the Hospital and took up motor cycling when that form of exercise became popular. This, sadly enough, was to cost him his life, for one day he charged a cart in the country, a shaft entered his chest and he succumbed very quickly after the accident. He was an expert chemist and, what is more, readily understood the many difficulties encountered by students of this strange, yet elementary, subject. A man for example, who has read the classics at school, or who has been fond of history, does not always accustom himself readily to the study of elementary science. It is one sign of a bad teacher when he fails to appreciate this and similar difficulties. When Wade died he was succeeded by Lowry. Now he had, quite at the back of his mind, some vague idea that attached to his chemical laboratory was a large hospital of some sort or another. After leaving Guy's he went to Cambridge.

In the physics department, Fison succeeded Reinhold and thereby added much to the amenities of the staff common room. He was a tall and impressive-looking individual with a face somewhat between that of a saint and that of an experienced man of the world. He had a very pleasant manner and would take a great deal of trouble to explain to me the stresses and strains in relation to fractures. I well remember seeing him in his laboratory doing a simple experiment which led to his temporary disbelief in the truth of Ohm's law ! Unlike some of his predecessors he kept reasonable order in his class, but on one fifth of November he fell alarmingly foul of the students. On this occasion pandemonium reigned in the lecture hall. Squibs and crackers of no mean size were let off by the audience and the lecture was brought to a summary close. Fison, I think, was perfectly ready to admit that he had come off second best in this unequal contest. Next year, on Guy Fawkes' Day again, Fison opened his lecture by solemnly warning the students that if he suffered any interference at all something might happen which they would find distinctly unpleasant. Calm thereupon reigned for about half-an-hour. Then a squib suddenly went off. Fison, without more ado, left the theatre. Almost immediately afterwards, a most terrific explosion rocked the lecture theatre and the students, panic-stricken, leapt to their feet in real alarm. Fison had made an explosive mixture of appalling noise, but little power, and had gone out of the room to set an electric current which ignited it. There was, I need hardly add, no third contest between Fison and the students. He died as tragically as Wade had done. Being much interested in the early problems of wireless telegraphy, he had rigged up an apparatus on the glass roof of his laboratory. It was through this that he fell one day and sustained a fractured pelvis, with internal injuries, from which he subsequently died. I was unaware of the accident until his death was announced. On the day that he died I was walking in that " dear land " between Broxbourne and Cuffley, and I am glad to think that on the day he left me, my conscience was as clear as that of a little child. For Fison had much of the little child in him.

The next teacher in the Medical School with whom I was acquainted was a strong-looking man who occupied the double sitting-room on the ground floor of the College. He thus looked out upon the library and reading room in the Club premises. He usually carried an umbrella, but I very seldom saw him wearing any overcoat. On the rare occasions that he did so he had possibly returned from, or was on his way to, some place or other where a grim job had been done, or where one had been ordered by the government to be performed. He had flat feet, but walked sturdily and with resolution. (I remember Littlewood of Leeds saying to his students that, apart from the increased superficial area that flat feet occupied on the pavement, there was little else to be found wrong with them.) Of urbane countenance, which gleamed from amidst a large grey beard and whiskers, this figure with whom I am concerned looked more than anything like a Cambridgeshire farmer of non-conformist or evangelical church opinions that he was prepared to sustain against any opposition. Yet this apparently harmless man had sent more murderers to the gallows than anyone else in England at the time. For he was Sir Thomas Stevenson, the great authority on medico-legal subjects, a man as generally respected in private life as he was in the law-courts of the land. I have sat near him at Guy's dinners and have enjoyed the hospitality of his charming wife and family at Streatham. His house there lay on the north side of the main road just beyond the station. I can be thus precise, for at the time of which I am speaking it was about the last house out of London in this direction. I walked along this road once and a man who was driving an American trotting horse stopped as he passed me and asked me to step up beside him. We drove together right round Croydon, seeing hardly any houses until we got to Beckenham. There I got down, and walked to my nearest station.

My frequent propinquity to Sir Thomas at dinners arose from the fact that Mr. Winston or his predecessor used to arrange the guests in alphabetical order. I hear many stories from Stevenson on these occasions. He used to relate them in a dry-as-dust manner, but there was always a gleam in his eyes as he told them, and these are the stories that come to me across the years. One summer holiday he was staying with his family at Grange-over-Sands and a terrible ferry disaster took place. " I was in the sitting room of the hotel," he said, " watching the boat come across the water when, suddenly, it turned over. I hurried out, and thirteen corpses came ashore, of which I succeeded in reviving four." This was his way of telling a story, which reflects the greatest credit on its narrator, and yet across the interval of years how clearly I can see him acting promptly, wisely and well. It may have been in the same hotel, but not, I think, on the same holiday, that Stevenson was aroused one night from sleep by loud and varying cries for a doctor. Slipping on a dressing gown he went outside to find an old lady who had slipped on the floor and sustained some fracture of the leg. He gave her attention, helped her to bed and saw that she was comfortable. Sometime later, when he was making preparations to return home, he was met with a bill for half-a-dozen bottles of the best whisky—not the kind of stuff that is sold under this name at the present day. On the production of the bill he " fell into a muse," as John Bunyan says, and thereafter made enquiries about the matter. He then found that on the night of the accident to the old lady several visitors had been disturbed and had played around the patient, doing nothing, but making stupid suggestions. It occurred to one of them that a doctor might be called and, after the accident and the attention which was given to it by Stevenson, they sat up late into the night drinking large quantities of whisky. In their stupor they unanimously resolved that the bill for the drink should be put down to Stevenson. He, when presented with it, very properly refused to pay. I have rarely read of a more dastardly example of bad behaviour.

Stevenson, I believe, was a Yorkshireman. In my student days his lectures were very well attended and I kept my copious notes on forensic medicine for many years after they were taken. I imagine that his urbane appearance and quiet voice must have led astray many a barrister who was cross-examining him. He used to give Shakespeare readings at his home and, amongst those who went, I recollect Mollison and the two brothers, Morton-Palmer. The elder of the two latter was in practice at Teignmouth, but retired comparatively recently. The younger is still in practice at Worthing. They had done well at Cambridge, the first in mathematics and the second in classics, and both did house appointments at Guy's.

Probably one of the best-known names at the Hospital was that of Starling, but I regret to say that I never knew him well. Nor did I become better acquainted with him when I met him whilst examining at the Primary Fellowship. He was widely known and acclaimed as an able investigator of physiological problems and in this field he had earned well-deserved credit for many important discoveries. Unfortunately, as a lecturer, he was not at all successful and indeed, he was probably not interested in this kind of instruction. By his contemporaries he was both well-liked and respected, but for his students, he was far too pre-occupied with physiological affairs to take much interest in their personal problems. On the other hand, his colleagues and later his successor, Pembrey was very popular with the students at large. Though he took a good deal from them, he returned it all with interest. He had very original views, some of which came to be recognised as correct only several years after they were first propounded. But the opinion that he promulgated in connection with some Royal Commission, namely, that not only was pain necessary but, also, that it was useful in producing compensating advantages, was never generally accepted—though there is probably more than a germ of truth in it. The trouble was that he had no facility for advancing his original views with tact and persuasion. Like Starling, he was a fellow of the Royal Society, and obtained this honour largely on account of his work on body heat. In common with some other teachers at Guy's, Pembrey was very easily taken in by the type of student who declared that he had a particular bent for research and over the years, I am sorry to say, I have seen many such men develop into mere idlers.

(*To be continued*)

Correspondence

Inguinoclasis

SIR,—Following Sir Heneage Ogilvie's stimulating article on " Inguinoclasis " which you published on December 30th, 1950, I was encouraged to examine the results of my operations for hernia since demobilisation from the Army in 1945. I did this because, following the publication by Norman Tanner in 1942 (*B.J.S.*, 1942, **29,** 285) of a description of the operation now known as the " Tanner's Slide Repair," I adopted this operation exclusively in all cases of inguinal hernia, both direct and indirect, in patients over the age of twenty. In no case did I find it impossible to perform this operation.

Stationed for a year at a hospital in the north of England which received a large proportion of recruits found to have hernia, I performed during the war years about two hundred of such operations. These cases are unfortunately untraceable, and the series under review consists only of cases from Guy's, the Surbiton Hospital, and from private practice upon whom I operated personally.

The method of following up my cases since August, 1945, has been to write to each patient and enquire whether there were any symptoms of recurrence. If the answer was unequivocally "No," the case was recorded as a satisfactory repair. If there was the slightest doubt, the doctor was written to, and in most instances the patient was asked to come up for interview. An accurate estimate was then made of his condition, and the case was categorised accordingly. In some cases, from the patients' reply, it was certain that there was a recurrence.

By doing the follow-up in this way, there are lumped together cases operated upon as long ago as six years, together with those operated upon recently, and it must be conceded that some cases, particularly those which have been operated upon recently, may develop recurrences. However, no case is included in this report unless it has been operated upon for at least a year and often, if a recurrence is going to appear, it will have done so within this period.

To quote, for instance, from Sir Heneage's article, " We know from wartime statistics in the Services that the recurrence rate of inguinoclasis is 20 per cent. within the first six months, and 30 per cent. at the end of the year." The results which I obtained can be tabulated as follows :—

Oblique Inguinal Hernia in Adults. (Tanner's Slide.)

Total	90
Satisfactory repair	82
Untraced	5
Recurrences	3

Of these three recurrences, two were recurrences on one side where a bilateral repair had been undertaken.

Direct Inguinal Hernia in Adults. (Tanner's Slide.)

Total	11
Satisfactory repair	8
Untraced	1
Recurrences	2

One of these two recurrences was on one side where a bilateral repair had been undertaken.

Oblique Inguinal Hernia in Children. (Simple excision of the sac.)

Total	15
Satisfactory repair	12
Untraced	3
Recurrences	—

Recurrent Inguinal Hernia in Adults. (Tanner's Slide.)

Total	4
Satisfactory repair	3
Untraced	1
Recurrences	—

Femoral Hernia. (Lothiesen's Repair.)

Total	18
Satisfactory repair	16
Untraced	2
Recurrences	—

Recurrent Femoral Hernia in Adults. (Lothiesen's Repair.)

Total	1
Satisfactory repair	1

The above results must be interpreted with caution because it is possible that some of the patients, replying apparently unequivocally that their repair is satisfactory, may indeed have small, unnoticed recurrences. Furthermore, a proportion may yet develop them. For this reason and because of the small numbers, I would not claim for this short note the status of a scientific report on the value of the Tanner's Slide operation. It would appear to me, however, that this operation can be recommended with the confidence that for the repair of oblique herniæ it is probably as sound a method as any. It has the additional advantage that it is almost universally applicable, is simple to perform and is not time-consuming. The appearance of two recurrences out of eleven cases of direct hernia is not a record which can be regarded as satisfactory. The figures are as yet too small to demand a change of policy, but a very open mind must be kept as to the suitability of this operation in cases of direct hernia. It may be noted that this short series bears out the well-known liability of bilateral herniæ to recur even though the repair is carried out, as it always should be, in two stages. A film of the Tanner's Slide operation is available in the Surgical Department for study.

Yours, etc.,

H. J. B. ATKINS.

Department of Surgery,
Guy's Hospital,
London, S.E.1.

The Students' Union Book Exchange

SIR,—*At the Annual General Meeting of the Students' Union held on 7th* November, 1951, a resolution was passed to the effect that any money owing in respect of the sale of books which has lain dormant in the accounts for two and a half years or more should be disposed of as the Students' Union Council think fit. It was ruled by the meeting that it should be donated to the Students' Tuberculosis Fund for so long as this appeal continues.

The sum at present concerned is approximately £7 or £8. Most of this stands to the credit of students who, having qualified, have left the Hospital without leaving instructions for the disposal of money owing to them. Further sums will become liable to appropriation as time progresses. Persons who think they are concerned should arrange to withdraw their money at the earliest possible date if they wish to avoid this happening.

At the moment the shelves of the Book Exchange are overflowing with books which are no longer or have never been recommended by the Staff of the Medical and Dental Schools ; some of these books have been unsold for upwards of three years. I therefore appeal to all students and ex-students to withdraw these books either personally or by post since it is most unlikely that they will now be sold.

Yours, etc.,

IAN M. BRIGGS,

Hon. Tresaurer.

Rugby

SIR,—Can we soon expect a revival of Guy's rugger form ? It used to be possible to read a report of our matches in at least one of the newspapers : now it is difficult to discover any mention save the final score.

Yours, etc.,

DENNIS TIMPSON.

Guy's Theatre Club

" ON MONDAY NEXT "
A Play
by
PHILIP KING
will be presented in the
PHYSIOLOGY THEATRE
on

Monday,	10th	December,	1951,	at	7.30	p.m.
Tuesday,	11th	,,	,,	,,	,,	,,
Wednesday,	12th	,,	,,	,,	6.15	,,
Thursday,	13th	,,	,,	,,	7.30	,,
Friday,	14th	,,	,,	,,	,,	,,
Saturday,	15th	,,	,,	,,	2.30 8.00	,, ,,

Seats may be reserved by application to the Hon. Secretary, Guy's Theatre Club. Admission is free but it is hoped to defray expenses by a collection which will be made during each performance. The Club will, however, be pleased to receive subscriptions beforehand. Cheques should be made payable to Guy's Theatre Club.

Reviews

Medical Bacteriology. By SIR LIONEL WHITBY and M. HYNES. Churchill. *Price 22s. 6d.*

In the preface to the 5th Edition of this book the authors state that owing to advances in the past decade, it has been necessary to re-write the entire volume so that almost nothing remains of the original text. It is therefore not surprising that so great an undertaking should result in a new edition with certain imperfections. This book covers a wide range of subjects, including useful sections on Parasitology and the Collection and Examination of Specimens. Reference is made to all the more recently discovered antibiotics and the chapter on Immunology is clearly written. With the exception of several electron micrographs, the halftone illustrations are of very poor quality. The illustrations of *B. coli*, *Cl. tetani* and *Br. melitensis*, if not frankly misleading, convey little useful information to the student. The text is relatively free from errors, but Prausnitz-Kustner is mis-spelt throughout the book and on page 175 *N. meningitidis* is said to be Gram positive. The volume is written in a style which suffers from the necessity of including many details of fact in the small space available. The reader may find the many page references in parenthesis throughout the text a source of considerable irritation and an obstacle to uninterrupted reading. K.F.A.

The Practice of Endocrinology. 2nd Edition. Edited by RAYMOND GREENE. Eyre & Spottiswoode. *Price 65s.*

This is a new edition of a textbook first published in 1948 and written by a distinguished group of contributors including D. A. C. Crooke, Dr. Donald Hunter, Dr. R. D. Lawrence, and Professor J. M. Robson. Such a team of authors is a recommendation in itself. The book makes a brave attempt to keep up-to-date in a subject which is advancing very rapidly, and it includes the first chapter to appear in a British textbook on Selye's adaptation theory ; but, perhaps wisely, there is little information given about the therapeutics of cortisone and A.C.T.H.

As well as large sections on the Pituitary, the Adrenals, the Thyroid and the Sex Glands, there are shorter chapters on Diabetes and on Calcium Metabolism. The problem of the Thymus and its relation to Myasthenia Gravis is discussed, and the book ends with a lively chapter on corpulence.

There are more misprints than there ought to be and pictures in plate 41 are apparently wrongly labelled. Nevertheless, this is a book well worth possessing. R.E.I.

CHANGE

Down through the valleys, through the foothills run
Echoes to the stagnant plain ;
Sound through the summer, the silence and the sun,
Sound above the city like the mutter of a drum,
To the coastline's hazy stain.

Down on the waters along the sea-shore come
Squalls from out the horizon ;
Shout above the sea-wrack, the salt-dunes and the spume,
Shout above their cadence as a struggle in a tune
And to leeward fitfully gone.

Gone to rack, to ruin, all the summer with the sun,
Thrusting through the city with the shudder of a gun,
Thrusting to the harvest which was standing in the sun
As the sailors batten down. J.C.D.

Sport

Guy's *v.* Bedford

At H.O.P. Result—Lost 3—13
20th October, 1951

Conditions were good for bright open Rugby and although Guy's lost to a strong Bedford side the crowd was not disappointed.

The game began at a fast pace and the sides seemed evenly matched until Bedford took the lead with a penalty goal. Guy's fought back and James scored an unconverted try half way out. Receiving the ball from a loose maul following a line-out, James had only the full back to beat and this he did by neatly stepping inside him. Fast open play continued with Guy's forwards getting the advantage in the scrums and generally outplaying the Bedford pack. B. Middle was unfortunate in not being given a try when he charged down a wild kick from the Bedford full back over their line.

From the kick off in the second half the Bedford backs came near to scoring in the corner. Guy's defended well but Bedford scored a good try through their left wing following some ingenious midfield play by Haynes and Towell. The try was converted.

The Bedford pack slowly regained control and although Guy's attacked well the backs were not so effective as those of Bedford. Bedford increased their lead shortly before no-side with another converted try and although Guy's attacked vigorously in the closing minutes further scores eluded them.

At full back Howells again excelled with some fine kicking and sound defensive play. Guy's forwards often gave the advantage away by repeatedly knocking the ball back from the line-outs, the result very nearly being disastrous.

Team : W. J. Howells ; E. O. James, E. D. Keen, S. C. C. Scott, G. B. Middle, G. D. Thomas, R. K. Knight ; J. W. Kirkbride, D. L. H. Clark, C. T. M. Wilson, J. C. Burt, C. W. Pook (Captain), D. P. Honey, W. G. Davies, B. J. Cremin.

RUGBY

Guy's *v.* Plymouth Albion

At Plymouth. Result—Lost 0—9
27th October, 1951

For the first game in Devon Guy's were without Pook, Davies and Meredith in the pack. The pack led by J. W. Kirkbride was experimental ; Labuscheyne, normally a hooker, played in the second row, Lee came into the front row and Wilson played in the middle of the back row.

Steady rain made conditions difficult and mistakes were frequent. Players had trouble in keeping their feet on the treacherous ground, scrummaging was ragged and line-out play on both sides was poor. The greasy ball made handling very difficult but the Guy's backs played creditably considering the limited opportunities which came their way. The pack was more subdued than usual and the absence of the three forwards was sadly felt. Honey got through a lot of good work during the course of the game.

Plymouth Albion scored through a penalty goal in the first half and two tries in the second. The first try was scored by a forward breakaway from a line-out and the second try following a kick up field from their 25 when Guy's were pressing hard near the Plymouth line in the closing minutes of the game.

Team : W. J. Howells ; E. O. James, E. D. Keen, S. C. C. Scott, G. B. Middle ; G. D. Thomas, R. K. Knight, J. W. Kirkbride (Captain), D. L. H. Clark, D. C. Lee, J. C. Burt, N. A. Labuscheyne, D. P. Honey, C. T. M. Wilson, B. J. Cremin.

Guy's *v.* Paignton

At Paignton. Result—Drawn 3—3
29th October, 1951

For the second match in Devon, Keen played at outside-half in the absence of Thomas. In the pack K. Wilderspin played in the second row and Labuscheyne as prop forward.

Heavy rain all the morning of the match which cleared in time for the kick off in the late afternoon, made the going difficult but the Guy's team—both forwards and backs together—played outstandingly and play reached a high standard.

Paignton playing slightly up hill in the first half took an early lead through a penalty goal for " foot up " in the scrum. From that point onwards Guy's had most of the play. Knight and Keen struck up an effective partnership at half-back and the ball quickly reached the wings. James had a couple of good runs on the right wing—gaining a lot of ground each time—and was unlucky not to score. The Paignton backs were badly deprived of any chances and when the ball was heeled it rarely got beyond the outside half—so close was the marking.

In the second half the Guy's forwards, with Kirkbride outstanding, supported the threes in attack on the Paignton line and on at least three occasions tries were narrowly missed. The Paignton forwards retaliated strongly at times and Guy's were hard-pressed in their own 25 for short periods. From a scrum near the Paignton line Keen, who played a grand game at outside-half, scored an unconverted try on the blind side when the Paignton defence was caught on the wrong foot. This equalising try spurred the Guy's team to greater efforts, and as the light faded Paignton were hard pressed to prevent further scores.

Team : W. J. Howells ; E. O. James, T. Smith, S. C. C. Scott, G. B. Middle ; E. D. Keen, R. K. Knight ; C. T. M. Wilson, D. L. H. Clark, N. A. Labuscheyne, J. C. Burt, K. Wilderspin, D. P. Honey, J. W. Kirkbride, B. J. Cremin.

Guy's *v.* Old Blues

At H.O.P. Result—Lost 3—11
3rd November, 1951

For this game Guy's made a number of changes but this can hardly be offered as an excuse for defeat in a game which never rose above "A" XV standards.

During the first twenty minutes the Guy's forwards obtained a fair share of the ball, but the apathy amongst the backs and an ignorance of the rules by the pack kept Guy's securely in their own half. Luckily the Old Blues were without a place kicker and five simple penalty kicks failed to yield any points, but eventually an attempted clearance by the full back was charged down and the Old Blues scrambled over for a try.

In the second half the smaller Old Blues' forwards out-scrummaged, out-jumped and hammered the Guy's pack into submission, supplying their backs with so much of the ball that eventually even their bald pated centre was able to carve a way through the febrile Guy's defence, and so another try and a goal were added to their score. In the closing minutes of the game a forward rush took Guy's into their opponents' half and W. G. Davies kicked a penalty goal for the Hospital.

For Guy's, Scott deserves mention for his defensive kicking, while in the pack Cremin and Davies alone played as if they were interested in the result. It is to be hoped that we will not again be subjected to such an illustration of how not to play Rugby for many years to come.

Team : G. D. Thomas ; E. O. James, T. Smith, S. C. C. Scott, J. C. Kingston ; L. P. Balfour-Lynn, R. K. Knight ; J. W. Kirkbride, D. L. H. Clark, N. A. Labuscheyne, J. C. Burt, C. T. M. Wilson, H. C. Meredith, W. G. Davies, B. J. Cremin.

RUGBY FOOTBALL

"A" Team Results

Sept. 29th *v.* **Rochester** (Away)
Won 10—6

Oct. 6th *v.* **U.S. Portsmouth "A"** (Home)
Won 18—3

Oct. 13th *v.* **U.S. Chatham** (Away)
Won 16—6

Oct. 20th *v.* **Bedford Wanderers** (Away)
Won 12—0

Oct. 27th *v.* **Shelford** (Home)
Won 11—3

Nov. 3rd *v.* **Old Blues "A"** (Away)
Won 27—5

ASSOCIATION FOOTBALL

Guy's *v.* Economicals

At H.O.P. Result—Won 1—0
22nd September, 1951

The Hospital opened the season with a home win against the Old Boys of the London School of Economics. The Hospital began rather shakily, which the visitors were quick to notice, the home goal was soon under heavy pressure, and only first time clearances by the defence prevented the Old Boys from scoring.

Soon afterwards the Hospital began to settle down, and play became end to end, though Grice in the home goal did well to tip one fierce drive past the post.

The Hospital forwards were sluggish, there was no bite or cohesion in their play ; being weak on the wings. However the second half saw the Hospital on the attack, and for a considerable time penned the visitors in their own half ; but they were unable to score. The Hospital were not to be denied however, for soon afterwards the inside left found the net with a powerful drive.

Play became rather scrappy and when the final whistle blew it was received with general relief.

Team : A. Grice ; A. Fearn, J. F. Wylie ; D. Matthews, D. Allen, G. Willcocks ; D. Fawkner ; R. Muscat, D. Harris, P. Shea, A. Constad.

Guy's *v.* Croydon Athletic

(Friendly away)
Result—Draw 2—2
26th September, 1951

The Hospital fielded a weekened team in a friendly game against Croydon Athletic. The Hospital defence was soon under considerable pressure with the home team playing attractive football. Guy's fought back hard, with some strong tackling from D. Lipington and A. Fearn.

The home team opened the scoring with a well-placed shot from their right winger.

Soon afterwards the Hospital struck back through Cornhill who, at centre forward, collected a pass and placed a beautiful ground shot into the corner of the net. This acted as a tonic to the Hospital and they attacked strongly.

Hopkins and Irwin, both newcomers to the side, gave of their best, while Leckie, who was dragooned into the side at the last moment, put in some good work at left half ; he was unfortunately taken ill and had to leave the field soon afterwards.

After the interval Guy's were soon on the attack ; backed up by some good clearances by Fearn at right back. The Hospital were now striving to take the lead and did so soon afterwards through Cornhill, who showed dash and determination at centre forward.

Play continued for the most part in the home team's half ; and their goal keeper was well tested by some strong drives from Lipington who was doing two men's work at centre half.

Leckie then returned to the field, and though the Hospital pressed hard, could not increase their lead. Shortly afterwards, due to bad covering by the defence, Croydon Athletic scored the equaliser. The final whistle blew with honours even after an enjoyable game.

A.F.A. Senior Cup

Guy's *v.* Bardhill

Away. Result—Draw 2—2 after extra time
6th October, 1951

Guy's fielded a re-arranged side for their 1st round tie, with three newcomers to the team.

The Hospital began confidently, playing constructive football, Maggs at inside right making some fine ground passes. However, the forward line found themselves up against a defence who were not going to let them settle down, and several promising movements were broken up by keen tackling by the Bardhill defence.

Bardhill were the first to score through their outside right, who collected a loose ball and scored with an excellent first-time shot.

Soon afterwards the Hospital took up the attack with Matthews consistently pushing the ball through to his forwards who, as yet, were not combining very well.

The Bardhill goal was now under heavy pressure, and it seemed that Guy's must score at any moment. But it was not to be. The forwards held on to the ball just a fraction too long.

However, Dade on the left wing netted for the Hospital towards the end of the first half, in one of the many scrimmages in the Bardhill goalmouth ; a worthy effort on his first appearance.

Just before the interval Bardhill took the lead through their centre forward, who headed a good goal past Grice—who was playing extremely well, and who had just previously made an excellent save from the same player.

After the interval the Hospital kept up the attack on the Bardhill goal area but were unable to score the equaliser ; the Bardhill goal and its keeper seemed to bear a charmed life and the ball seemed to go everywhere but in the net.

The Hospital were not to be denied, however, and Shea deflected a loose ball into the net to equalise. Soon afterwards, the whistle blew for full time, and as extra time was to be played, a 5-minute breather was given, both teams by this time being very weary.

Play restarted, and though Guy's were well on top, they could not take advantage of the fact. Extra time was played out with no addition to the score. The final whistle blew, and 22 very weary players left the field.

Team : A. Grice ; A. Fearn, J. F. Wylie ; D. Matthews, N. Crabtree, C. Holden ; P. Shea, C. Maggs, K. Watmore, D. Harris, J. Dade.

A.F.A. Senior Cup Replay

Guy's *v.* Bardhill

At. H.O.P. Result—Won 6—1
13th October, 1951

Guy's won the replay against Bardhill, but not in the manner that the score suggests. The Hospital took an early lead through Maggs who won a race with the Bardhill goalkeeper for possession, and deflected the ball over his arms into the net. The Guy's defence on the whole was sound and steady with Southgate doing some useful bulldozer work on his first appearance this season. The forward line was disappointing ; there were too many stray passes, and the game should have been won comfortably in the first half.

As it was the game dragged on into extra time, Bardhill scoring an equaliser after the interval. The forwards were trying hard, but their finishing was poor ; too many shots were going high over the crossbar.

Soon after extra time had begun, Watmore made a fine run up the left wing, centred, and Maggs did all that was required to put the Hospital ahead. The forward line now began to move with cohesion and rhythm, and goals came fast and furious in the closing minutes. Watmore completed a hat-trick, Maggs scored a fine goal to make his score two, while Cornhill had previously scored, after a good run on the right wing, with a grand shot which left the goalkeeper helpless.

Team : A. Grice ; A. Fearn, J. F. Wylie ; D. Matthews, D. Allen, P. Southgate ; B. Cornhill, C. Maggs, D. Harris, K. Watmore, N. Crabtree.

Southern Amateur League

Guy's *v.* Alleyn Old Boys

Away. Result—Lost 3—1
20th October, 1951

Guy's travelled to Herne Hill with a slightly weakened team ; with a goalkeeper of unknown ability and an experimental forward line. Whatever the weaknesses were on paper, they certainly were not reflected in the play, and the Guy's team played their best game to date against a strong team.

The Old Boys were soon on the attack, being backed up by a clever, forceful half-back line. The Hospital defence with Crabtree at centre half took up the challenge in grand style, and played hard and skilfully in keeping the home forwards at bay.

J. Aust in goal gave a competent performance, always ready to use his height and reach to best advantage.

Guy's opened the score just before the interval when Watmore seized on a dropping ball to rattle the back of the home net from 25 yards. This greatly heartened the Hospital side, and they kept the Alleyn's defence at full stretch.

The second half saw the Guy's defence under continuous attack ; but the defence were playing extremely well with Fearn, Wylie and Crabtree showing great spirit. Alleyn equalised after a scrummage in the goalmouth following a corner ; they took the lead in a similar fashion soon afterwards ; bad marking by the half-backs in the goalmouth was the chief cause of the Old Boys' success.

Just before time Alleyn's added a third, through their centre forward. This game showed that the Hospital must concentrate on securing the ball in mid-field ; not leaving the initiative to the opposition. All told, however, it was a worthy performance by the Hospital team.

Team : J. Aust ; A. Fearn, J. F. Wylie ; N. Crabtree, P. Southgate, D. Matthews ; A. Horsfield, D. Harris, A. Robinson, K. Watmore, P. Shea.

Southern Amateur League

Guy's *v.* Cuaco

Away. Result—Lost 6—1
27th October, 1951

After the previous week's spirited performance, much was expected from this match. Alas, it was not forthcoming, and the team gave their worst performance this season.

The forward line were almost totally eclipsed in the first half ; whether it was the aftermath of the general election or the success of one of their member's celebrations, it will remain an unsolved mystery.

The home side, who were flattered by their five-goal margin, combined well as a team, showed dash and determination and were quick to seize on the many mistakes made by the Hospital defence.

Until the team are quicker to seize the ball and dominate the centre of the field, the forward line will not receive the passes required to score goals.

The Hospital side will have to play as a team and not as individuals if they intend to do better this season.

Let's see some dash and determination in future, Guy's ; and as a team.

Team : A. Grice ; A. Fearn, J. F. Wylie ; D. Allen, G. Willcocks, D. Matthews ; A. Horsfield, C. Maggs, C. Leckie, K. Watmore, A. Robinson.

A.F.A. Senior Cup

Guy's *v.* Derby All Blacks

At H.O.P. Result—Lost 3—2
3rd November, 1951

Guy's were hosts to the Derby All Blacks in their 2nd round tie of the A.F.A. Senior Cup, and had the satisfaction of giving their best display this season, although it was not sufficient to win the match.

The All Blacks began confidently, playing constructive football, making the ball do the work, and were soon pressing the home defence.

The Hospital side settled down quickly with Shea and Burns on the left wing showing some promising movements.

The All Blacks opened the scoring through their outside right, who sent in a low ground shot which seemed well covered by the home goalkeeper who let the ball slip through his hands and legs into the net. This was bad luck for the Hospital, but they struck back gamely, and the visitors' goal had some narrow shaves with Shea and Watmore prominent in the attack. Play became even, with Guy's obtaining a firmer grip on the game ; but the All Blacks increased their lead when the home goalkeeper, who was not having a good day, failed to hold a drive and the ball rebounded for one of the All Blacks' forwards to score an easy goal.

After the interval Guy's set about playing hard football, which was a tonic after the mediocrity of the previous week. Crabtree scored for the Hospital in the middle of the second half ; the All Blacks immediately replied, and a real ding-dong struggle ensued. Guy's had several chances to score, but everyone was putting their backs into the game, and Watmore, who was showing more of his old form, scored a fine opportunist goal. Guy's now fought for the equaliser and took several corners in rapid succession. The All Blacks defence held out, and the whistle blew to bring a hard-fought but enjoyable game to a close. Guy's must try to apply the pressure earlier in the game.

Team : A. Grice ; A. Fearn, J. F. Wylie ; D. Allen, D. Matthews, P. Southgate ; B. Cornhill, N. Crabtree, K. Watmore, P. Shea, P. Burns.

FENCING

Guy's *v.* R.N. College, Greenwich

Result—Won 9—7

A four-foil match was played at the R.N. College on 15th October and won by 9 fights to 7. Individual scores were as follows :—

	Won	*Lost*
Ingram	4	0
Fuller..	1	3
Sykes	1	3
Mallett	3	1

Hospital Information, etc.

APPOINTMENT VACANT

GUY'S HOSPITAL & MEDICAL SCHOOL

Applications are invited for the appointment of **Registrar** in the **Department of Anæsthetics,** duties to commence as soon as possible. Forms of application, obtainable from the Medical School Office, should be sent to the Dean not later than **26th November, 1951.**

APPOINTMENTS

A. G. C. Charlton Cox appointed Consultant Physician, Bermondsey and Southwark Group of Hospitals.

A. F. Rushforth, M.B., F.R.C.S., appointed Orthopædic Surgeon, Finchley Memorial Hospital and St. Albans City Hospital.

A. J. P. Graham, M.B., B.S., F.R.C.S., appointed Senior Surgical Registrar, Post-Graduate Medical School, Hammersmith Hospital.

PASS LIST

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A. E. Strigner
C. H. W. Warne
I. R. Wiernik

* Have completed the examination.

D.T.M. & H.

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M.R.C.P.

October, 1951

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October, 1951

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Pathology, Bacteriology and Forensic Medicine

*M. S. Compton
K. G. Somers-de-Haney
*B. Vergano

* Have completed the examination.

GUY'S HOSPITAL REPORTS

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CHRISTMAS CARDS

Christmas Cards are on sale in the *Gazette* Office, 6, St. Thomas' St., S.E.1. Prices : 6*s*. and 5*s*. 6*d*. per dozen, including envelopes (per post 6*d*. extra), single cards (without envelopes) 2*s*. 6*d*. per dozen (post 6*d*. extra). Early purchase is advised to avoid disappointment.

MARRIAGE

BUTCHER—DAWSON. — On September 15th, 1951, at the Church of St. Mary the Virgin, Battle, Sussex, Peter Butcher, A.C.I.I., to Margaret Hazel Dawson, S.R.N., S.C.M.

DEATHS

DOWSETT.—On November 13th, 1951, Ernest Alan Dowsett, D.S.O.(T.D.), F.D.S., M.R.C.S., L.R.C.P., L.D.S., R.C.S., 12, Gloucester Place, London, W.1.

DREWITT.—On October 2nd, 1951, Alfred Drewitt, L.D.S., R.C.S., of " Western View," Western Road, Hurstpierpoint, Sussex.

Eds. R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

THE *awful sense of inadequacy which steals over the newly qualified house* surgeon faced with his first responsibilities is almost as great, if anything could be, as that felt years before on arrival at a new school. The geography is strange, the overlords and underlords are strange, the traditions, sacred though they may be, are none the less strange. There is nothing to cling on to save a few basic principles which one hopes fervently may still be found to apply. Whereas, however, much can be achieved as a new boy at school by remaining thoroughly inconspicuous, in a hospital the very nature of the job makes inconspicuousness anything but a virtue. There is a constant succession of small decisions to be made with, it may be, far reaching results for good or ill; and in making them most house surgeons will probably agree that their greatest weakness at the outset is a more or less complete and more or less abysmal ignorance of the day to day problems of nursing.

Having wandered in and out of the wards for nigh on four years it is suddenly brought home to one that, though something has been learned from the look of patients' faces, the shape of their temperature charts and the feel of their pulses, the ceaseless process of nursing carried on before one's very eyes, has left little or no impression. Perhaps this is due to reticence and an anxiety not to interfere, perhaps to cowardice. If truth were told, most of us having returned a patient from the operating theatre to the ward, are only too anxious to escape again before the patient begins to regain consciousness. As with these problems, so with others—the handling of relatives, the provision of analgesics, the maintenance of charts, the care of dressings, diet, weight, sleep ; all these problems which seem so unexciting or academic to the student with his seven causes of auricular fibrillation and his seventeen of hepatosplenomegaly—*all these are nevertheless the true problems of everyday.* Happy and fortunate indeed is the new house surgeon who is pushed quietly along by an efficient nursing staff until his own two feet will bear his weight.

There is an answer, no doubt, to such inadequacy at the commencement of a resident appointment. The answer, we believe, lies not in the alteration of the curriculum or the present methods of teaching students ; it lies, fairly and squarely with the clinical student. If he is wise he will cast his eyes about him whilst in the wards and notice not only the surgical and medical procedures going on but the nursing ones as well. At present the difference between the neatness and efficiency of a nurse's bandage compared to the wretched and bedraggled arrangement by the average junior doctor, is symptomatic of their relative experience in the nursing of patients.

Some things, happily, still remain beyond the scope of lectures and demonstrations. The teaching of nursing to medical students is one of them. At present it lies, quite unofficially, with the sisters and nursing staff and in some sense comes as the reward of the conscientious and helpful clerk and dresser. For this reason students at Guy's, more than any, have, if they remain ignorant of the basic problems of nursing, no one but themselves to blame.

We have been asked to remind our readers that only one copy of the "History of Guy's" may be purchased by each student at the reduced price of 12/6.

Obituary

COL. E. B. DOWSETT, D.S.O., T.D., F.D.S., M.R.C.S.

COL. DOWSETT entered Guy's as a student in 1894 and took the course for his Conjoint and Dental Diplomas ; this he completed in 1899. in 1947 he was among the first to be elected to the newly-instituted Fellowship in Dental Surgery. He was appointed to the Junior Staff when he qualified and soon proved himself to be an efficient teacher. As a Dental tutor he had a great following and his " Notes on Dental Surgery " went through eight editions. During the 1914–18 war he was A.D.M.S. to the 60th London Division and served with them in France, Salonika and Palestine ; becoming eventually D.D.M.S. to the 20th Corps. For his services he was mentioned in despatches four times and awarded the D.S.O. Returning to civil life his teaching at Guy's was distinguished, both upon its clinical and upon its intellectual side. He was for many years a Governor of the Schools. He was appointed an Examiner to the Royal College of Surgeons, the University of London and in several Provincial Universities. Between the wars he served on numerous committees at the War Office. He was President of the Odontological Section of the Royal Society of Medicine in 1931 ; for many years he was an active official of the British Dental Association, of which he was President when he died. Dowsett was the perfect gentleman, always quiet in manner, courteous, well dressed. In the hearts of his friends he has an abiding place. F.N.D.

A PERSONAL APPRECIATION

The sudden death of E. B. Dowsett at the age of 76 years, who, for the last 56 of them had been continuously associated with the Hospital and Medical School, has left a gap which will be sadly felt for as long as there is anyone left who knew him. I first met him soon after I entered the School when he was a Demonstrator of Practical Dentistry. Later I came under his instruction when I attended the last series of coaching classes he gave after being appointed to the senior staff, and I soon appreciated the clarity of his teaching and the grasp he had of the fundamentals so necessary to the young student. We became closer about this time, and a friendship to me developed which continued up to his death. This was in part due to the affection we both had for the River, for when I was rowing at Twickenham he had a garden to the river by Twickenham Ferry and spent much time afloat in a punt with his wife. We met at all the up-river regattas, and Henley for them was an essential part of the summer seasons.

The first world war came and he was appointed A.D.M.S. of the 60th Division which then existed on paper only, and I became a medical officer in one of his Field Ambulances—also in embryo—in which I stayed until the Armistice, still under his command. He developed the medical services in his division from nothing into the fine units they became as time passed. I saw him regularly during these years in all the variations of climate, and the adversities that we met, and he was always the same—kindly and considerate to all ranks.

Back at Guy's again from 1919 onwards he quickly slipped back into the role of kindly teacher and great operator.

Away from the Hospital he was a perfect host. I remember the tennis parties at the house at Walton-on-Thames which he and Mrs. Dowsett delighted to give, and the beautiful garden in which they were held. There were also small dinner parties in winter as a preliminary to the performances of the Twickenham Amateur Dramatic Society, in which his daughter played a leading part. All these contacts were so homely and made so kindly that it was a delight to be their guest.

Men like Dowsett do not appear in every generation, and we at Guy's have been greatly favoured in that we have had him with us for so long.

G.B.P.

The Recognition of Malignant Disease in the Mouth

By S. H. WASS, M.S., F.R.C.S.

A Dental Clinical Lecture delivered in the Medical School on November 12th, 1951

THE Dental Surgeon has a great part to play in the recognition of malignant disease in the mouth. More than 2,000 people die every year in England and Wales from cancer of the mouth, and it is estimated that for every patient who dies there are three alive with the disease. Perhaps ninety per cent. of the sufferers consult their dentist rather than their doctor when symptoms are first noticed. The dental surgeon is therefore granted unique opportunities for the early recognition of malignant disease ; and his frequent routine examinations of the mouth may even allow him to detect a cancer before the patient is aware of its presence.

These golden opportunities must not be missed. Cancer of the mouth has a grave prognosis, and it is only by early recognition that the results of treatment can be improved and more lives saved. To recognise early cases you must be scrupulous in your examination of the mouth. You must discipline yourselves to think of the possibility of cancer *in every localised lesion* in the mouth which persists for two weeks or more in spite of proper treatment. You *must not wait* for the development of physical signs which no longer leave the diagnosis in doubt. The doubtful lesion is the most favourable for treatment ; the early definite lesion offers a good chance ; but the advanced lesion and the involvement of lymphatic glands in the neck leave the patient with little hope of salvation.

To serve your patients and to fulfill your obligations in the diagnosis of this serious disease you must know four things :—

1. Where cancer occurs in the mouth.
2. What are the lesions which predispose to cancer of the mouth.
3. What are the early signs and symptoms of malignancy.
4. What to do with the doubtful lesion.

PRIMARY SITES OF CANCER IN THE MOUTH

Cancer of the mouth is a malignant epithelial tumour, a carcinoma. It can arise in any part of the mucous membrane but usually occurs at certain well-defined sites. In order of frequency these are :—

The tongue.
The lip.
The palate.
The tonsil and pillars of the fauces.
The floor of the mouth.
The buccal mucosa.
The alveolar mucosa.

Malignant disease in the tongue is three times as common as in the lip and six times as common as anywhere else in the mouth. Nevertheless the other sites account for thirty per cent. of all malignant tumours of the mouth. It is therefore important to know of its occurrence at these sites and to be able to recognise it.

Most growths of the *tongue* occur in its anterior two-thirds, but the posterior one-third is also affected and early lesions at this site are much more difficult to detect. In the anterior part of the tongue the edge, inferior aspect and dorsum are affected in that order of frequency. Cancer of the *lip* involves the lower lip far more often than the upper. In the *palate* either the hard or the soft part may be affected. It must be remembered that lesions of the hard palate may represent an extension of growth through the floor of the *maxillary antrum* and not a primary lesion of the palate itself ; the antrum must therefore be examined radiographically in all these cases. In the *buccal mucosa* the tumour occurs on the inside of the cheek or in the buccal sulcus. In the *alveolar mucosa* the mandible is involved more often than the maxilla.

PRE-CANCEROUS LESIONS

Cancer of the mouth is often preceded by changes in the mucous membrane which are liable to malignant degeneration. Gross *dental sepsis* is a common associated lesion. The teeth are usually covered with tartar and may be loose ; jagged stumps are often present. The gums are receded and inflamed. Nowadays gross dental sepsis is not seen as often as it used to be and statistical evidence shows a steady decline in the incidence of cancer of the mouth, particularly of the tongue. It is doubtful if the lowered incidence is due to improved dental hygiene alone, but the efforts of the profession in this direction have done much good.

Leukoplakia of the tongue, lips, palate or buccal mucosa is still commonly seen when inspecting the mouth. This type of chronic superficial inflammation is undoubtedly pre-cancerous and a careful watch must be kept for any alteration in appearance which suggests malignant change. In the early stage of leukoplakia the superficial layers of the epithelium are shed and a sore red patch develops. Proliferation of the deeper layers then takes place and the affected areas are covered with white hyperkeratotic mucosa. Later still, portions of the hyperkeratotic epithelium may be cast off to expose once again the deeper layers which are red in colour. Thus the area of leukoplakia is first red, then it is white and then it is red and white. In the red and white stage malignant changes may occur. The palpating finger may detect an area of induration ; malignant proliferation of the epithelium may produce a heaped-up nodule in a region previously flat ; or a malignant ulcer with raised edges may develop.

Tertiary syphilis (Syphilitic glossitis) is much less common than in bygone days, but it is a pre-cancerous lesion. Any change occurring in the tongue of a patient with a positive Wassermann reaction is a malignant change. Many patients with leukoplakia also have a positive Wassermann reaction, but no greater mistake can be made than to attribute localised changes in an area of leukoplakia to syphilis ; they are always malignant.

Chronic irritation in the mouth also predisposes to cancer. A dental or traumatic ulcer may undergo malignant metaplasia. There is no evidence that tobacco is carcinogenic within the mouth but the smoker's patch, due to the heat of the smoke and common in pipe-smokers, may be the beginning of a malignant lesion. Less common lesions, which may be pre-cancerous, are the atrophic changes which occur in Plummer-Vinson's syndrome and vitamin B deficiencies.

EARLY SIGNS AND SYMPTOMS

Malignant disease of the mouth is four times as common in men as in women. It usually occurs in patients over fifty years of age but younger patients are not exempt. The earliest symptom is usually the tumour itself. It is noticed as a " lump " in the tongue, or felt by the tongue in some other part of the mouth. On looking in the mirror the patient may see nothing wrong or may notice a " lump " or " ulcer ". He complains of something sore, rough or pricking in his mouth and his natural reaction is to think it due to a sharp tooth or to pressure from his denture. It is in this early stage that the dental surgeon has his greatest opportunity and his greatest part to play.

Unfortunately, early lesions are not painful. At the most the patient will complain of discomfort on eating, drinking hot fluids, or on swallowing if the tumour is in the back of the mouth. There are no other early symptoms and you will have done great service to your patient if you recognise a growth before later symptoms occur. You will have done the best work of all is you are fortunate enough to notice a tumour before the patient is aware of its presence. Late symptoms which you read about in the text-books, such as pain, excessive salivation, difficulty with speech or swallowing, and hæmorrhage, mean only that the patient is doomed.

The physical signs of malignant disease are the same in all situations in the mouth. The growth is a squamous-celled carcinoma and shows itself clinically in three ways : the malignant ulcer, the papilliferous growth and the infiltrating nodule. The papilliferous growth is the most favourable, the nodular type is the worst and the ulcer is intermediate in degree of malignancy. The *ulcer* is the commonest variety of cancer of the mouth. It is characterised by having edges which are raised above the level of the surrounding epithelium ; these edges are rolled, everted and hard on palpation. The *papilliferous growth* is also a raised lesion but is not always hard ; its surface is rough and irregular, contrasting with the smooth surrounding mucosa. The *infiltrating* *nodule* is the rarest type of buccal carcinoma. It is always hard, but because it spreads in the sub-mucous and deeper tissues it may not be raised above the surrounding epithelium.

In the early stages all these different types of growth are small and localised. It is only later that they become more extensive and involve neighbouring structures. Extensive tumours, particularly those involving bone, are usually incurable and often beyond any hope of treatment. It is therefore of paramount importance to recognise a malignant growth in its earliest and localised stage. Better still is to suspect it when the lesion is a doubtful one without irrefutable signs of malignancy. *Every localised persistent lesion* in the mouth, be it an ulcer, a rough patch or a palpable nodule, must be considered to be a cancer ; and a positive Wassermann reaction does not exclude this possibility.

Metastases from cancer of the mouth to the lymphatic glands of the neck are a sign of advanced disease. On no account must you neglect to think of the possibility of malignant disease because a lesion is not accompanied by glandular enlargement. Occasionally an early lesion is associated with enlarged glands in the neck ; this is an indication that the tumour is anaplastic and rapidly-growing, and implies a grave prognosis. Sometimes glandular involvement is due to sepsis and not to secondary deposits of malignant disease. Ulcerated growths in the mouth are infected on the surface and extension of this infection along lymphatic vessels may cause enlargement of the regional glands. Septic glands will subside when the primary growth is eradicated and if this occurs the prognosis is materially improved.

THE DOUBTFUL LESION

I have tried to emphasise the importance of recognising malignant disease of the mouth in its early stages. Too often valuable time is lost because early but definite lesions are not suspected of being malignant ; and because dentists and doctors alike persist with local treatment in spite of it being ineffective. Of equal if not greater importance is to know what to do with the doubtful lesion ; the lesion which does not show definite signs of malignancy but which persists in spite of adequate local treatment. You have done your duty in suspecting cancer in these cases ; be careful that you do not fail by omitting to act as commonsense dictates.

The common doubtful lesion is a persistent ulcer, rough patch or palpable nodule in the mouth. It is often attributed to irritation by a sharp tooth or badly-fitting denture. If such a lesion is not obviously malignant, by all means take steps to remove any cause of irritation which is found. If soreness of the lesion makes wearing a denture impossible the patient will usually have tried the simple device of leaving his denture out. Any lesion which does not heal in two weeks after removing a possible source of irritation must be considered malignant ; and a biopsy must be performed at once. The common mistakes are to assume a lesion to be traumatic when no source of trauma is found ; and to persist too long with local treatment of the lesion itself. There is no place for the application of silver nitrate or other caustics to these localised lesions ; a biopsy will settle the diagnosis and may save the patient's life. The biopsy must be adequate ; a block of tissue at least half a centimetre wide and half a centimetre deep should be taken from the edge of the lesion. Smaller fragments do not allow the pathologist to give an accurate report.

If a doubtful lesion is in an area of leukoplakia, or if it is associated with generalised dental sepsis, scaling of the teeth and extraction of stumps should be carried out. Mouth washes and applications to the gums should also be employed. But once again, if a localised lesion does not heal with this treatment in two weeks a biopsy must be performed. A positive Wassermann reaction in a patient with leukoplakia must not be allowed to allay suspicions when a localised lesion is present. Time must not be wasted by giving anti-syphilitic treatment which has little if any affect in these patients. Only a biopsy can settle the doubt.

I have spent the whole of this lecture on the need for early diagnosis in cancer of the mouth and have suggested a practical course of action for you to follow in cases of doubt. I will now show you some slides to illustrate the methods of treatment employed for the various lesions and the prognosis of malignant disease in its common sites in the mouth. The statistics of five-year cure-rates make poor reading. I hope you will be impressed by the enormous improvement which is possible in these figures and which you can help to achieve by earlier diagnosis and by sending your patients for treatment while the disease is still curable.

	TONGUE	LIP	PALATE
Clinical Features	Ulcer Papilliferous Infiltrating Any part of tongue. Fixation in late cases.	Ulcer Papilliferous Nodular Lower lip in men.	Ulcer Papilliferous Mixed salivary Hard or soft palate and pillars of fauces. (*N.B.*—Maxillary antrum.)
Histology	Squamous-celled (Lympho-epithelioma).	Squamous-celled.	Squamous-celled. Mixed salivary tumour.
Glandular Enlargement.	Early 80% of all cases.	Late 25% of all cases.	Early Hard palate 50%. Soft palate 95%.
Treatment of choice for primary lesion.	*Anterior :* Radium needles. *Posterior :* Teleradium.	*Small lesion :* Excision or radium. *Large lesion :* Surface radium or needles.	*Hard palate :* Diathermy excision followed by surface radium. *Soft palate :* Teleradium.
5-Year Survivals.	22%	50%	*Hard palate :* 50%. *Soft palate :* 5%.

	TONSIL	FLOOR OF MOUTH	INSIDE OF CHEEK	ALVEOLUS
Clinical Features.	Ulcer Nodular	Ulcer Papilliferous Infiltrating Possible involvement of bone.	Ulcer Papilliferous Nodular Molar region.	Ulcer Papilliferous Infiltrating Molar region of lower jaw. Bone involvement common.
Histology	Squamous-celled Lymphosarcoma. Lympho-epithelioma.	Squamous-celled. (Adeno-carcinoma.)	Squamous-celled. (Adenocarcinoma.)	Squamous-celled
Glandular Enlargement.	Early. Carcinoma 66%. Sarcoma 80%.	Early. 80% of all cases.	Late. 50% of cases.	Early. 50% of cases.
Treatment of choice for primary lesion.	Teleradium.	Radium needles. Teleradium if extensive. Excision and X-rays if bone involvement.	Excision and radium if small. Teleradium if large.	*Early cases :* Surface radium or teleradium. *Bone involvement :* Excision and X-rays.
5-Year Survivals.	24%	40%	60%	16%

The Role of the Chiropodist

By JOHN H. HANBY, F.Ch.S.

Consulting Chiropodist to Guy's Hospital, London, and London Foot Hospital ; President of the Society of Chiropodists.

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THE position of the chiropodist in relation to the medical profession and to other medical auxiliaries is not very clearly defined, although his role in the life of the general public is now firmly established. The difficulty, if difficulty it is, in the first instance, is that although a medical auxiliary, the chiropodist does not necessarily receive his patients through the medical practitioner and perhaps because of this, his work is not so widely known and understood by the senior profession as that of the other auxiliary medical workers. It is only in the last twenty years that chiropodists have been appointed to hospitals, but these appointments are increasing rapidly, bringing individual members of the profession into closer contact with the wider aspect of general medicine and surgery.

Although chiropody is comparatively young as an organised profession, it has existed in one form or another for many centuries, conceived by the necessity for relief from painful feet. Within recent years large numbers of the public have sought this specific treatment. Before that time there were only a few very highly skilled practitioners, whose services were mainly given to the more affluent section of the community. The fact that so many of the public now avail themselves of this treatment is an indication either that the incidence of painful feet has become more numerous or that people are more aware that the chiropodist is capable of giving treatment which relieves pain and satisfies their needs. As there is no evidence that foot disorders are any more prevalent nowadays than in the past, the obvious conclusion is that the chiropodist is now justifying his position among those who administer the healing arts. Another reason for the large increase in the number of people now receiving treatment is undoubtedly an economic one ; treatment has become financially possible to more people. Although chiropody is only part of the Hospital and Specialist Service under the National Health Service and therefore only a very limited number receive treatment without payment, there are many others who receive treatment for reduced fees and undoubtedly in industrial districts a greater proportion of the public are now able to pay a private practitioner's fees than was possible twenty years ago.

One of the most successful ways of introducing chiropody to large bodies of workers has been through having chiropodists actually working in large industrial organisations. These schemes have proved to be a great asset to industrial efficiency besides being very much appreciated by the workers themselves. The appointment of chiropodists in Royal Ordnance factories during the last war was of the utmost value in assisting to maintain good health among the staff. From the chiropodist's point of view it educated a great number of people in the value of the treatment and each person who had once received benefit from it was a potential patient, whether employed in a factory where it was provided or whether they had to seek it for themselves.

Other means of treatment, at a nominal figure, are provided by some local health authorities in their areas, and a scheme which has become very popular. However, by far the greatest amount of treatment is given by private practitioners, some of whom also hold part-time hospital appointments.

The number of chiropodists practising in the country has increased considerably recently and training is scientific and well balanced. The student undergoes at present a period of two calendar years full-time study, but a decision has recently been made which will extend this to three years. Schools which undertake the minimum curriculum are approved by the Society of Chiropodists, who register students and conduct the qualifying examinations. There are eleven such schools in England and Scotland, the names of which can be obtained from the Secretary of the Society of Chiropodists.* Some of the schools are under the ægis of the Ministry of Health, some the Ministry of Education, and others are privately owned. All members of the Society are registered with the Board of Registration of Medical Auxiliaries. The course is a strenuous one, for a high standard is expected of the students. In order to provide a background for later studies, the student commences his training with a course in the basic sciences followed by anatomy physiology, elementary histology and pathology and has the first professional examination at the end of twelve months. The second year's work embraces medicine and surgery, some dermatology and orthopædic surgery in its relationship to foot disorders. The theory of chiropody, which is founded on a sound medical basis, is taught throughout the course and by the time the student has completed his training he will have treated approximately 2,000 patients clinically. The final examination in medical and surgical subjects is conducted by external examiners appointed from a panel approved by the Royal Colleges of Physicians and Surgeons of England.

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* The Society of Chiropodists, 21 Cavendish Square, London, W.1.

The work of the chiropodist is popularly conceived as the treatment of corns, callosities, ingrowing nails, bunions and verrucæ. Indeed, the removal of corneous growth used to be considered the chief scope of the chiropodist. His function is undoubtedly to relieve pain in this direction, with skill and the minimum amount of discomfort. But this is a very limited view of his work which has remained from earlier days. He does indeed treat these disorders for they constitute by far the greatest source of misery in the human foot. But he regards corns and similar lesions, not as self-contained entities subject to a simple explanation, but as symptoms of some derangement in the structure or function of the foot. In the first place his mind is focused on the contours of the foot and its efficiency as a piece of human mechanism ; the localised manifestations are a secondary consideration. He is also aware that corns themselves should be taken seriously, as the pain arising from them can have a harmful inhibitory effect on the normal smooth working of the foot.

The chief cause of pain in the feet is over-work of some type. This may be due simply to overworking a thoroughly sound foot or it may be that the foot is so inefficient that it cannot undertake a normal amount of work. Thousands of men and women are doing too much for an average foot. Consequently their feet become strained under the stresses imposed on them. Chiropodial treatment endeavours to lessen the severity of the impacts so that the foot can absorb the load with the minimum of harmful effects. Then, of course, there are the peculiar types of feet which give rise to painful conditions because the bony or muscular structure is not up to standard. Low-capacity feet are generally those with congenital peculiarities or acquired deformities. Many of the derangements are so slight that they are easily overlooked as possible sources of painful feet. One of the main causes of pain in the forefoot is due to inefficient toe function. This poorness of toe action is commonly due to the fact that the intrinsic muscles of the foot are not functioning as they should. Very often this condition follows one of the childish febrile complaints such as measles. As the toes are not held steady by the intrinsic muscles when the long flexors and extensors come into action, the toes claw up and in this way they do not allow the fulcrum of the foot, at the take-off, to be spread over the largest possible area, but instead is concentrated on to the metatarso-phalangeal joint area. This concentration of pressure in one area causes stress and strain on the tissues. The treatment in these low-capacity feet is to re-adjust the foot's method of weight-bearing and to stabilise those feet which are incapable of correct balance and leverage during walking. The main object of all treatment is to nullify the strain. To sum up, the intention of the chiropodist is to overcome pain and discomfort by the provision of rest ; all his treatments converge towards this principle.

In general, the role of the chiropodist is to keep people on their feet. Although he aims at mechanical rest, most of the treatment can be done without putting the patient to bed. His patients on the whole are not ill, but become inefficient members of the community because they have persistent pain in their feet. Of course, it is not infrequent that his work is important in the treatment of systemic disease. The sufferer from rheumatoid arthritis can gain enormous relief from the application of skilfully-moulded padding to deviate pressure away from the painful joints ; the diabetic patient with an ulcerated condition of the foot can often be saved from still further trouble by a combination of stabilisation and chiropodial treatment. But with the diabetic the main thing about the treatment is the constant vigil on the part of the chiropodist to see that ulcers and their end effects do not occur. It is noteworthy that many diabetic clinics have a chiropodist attached for the care of the feet and their assistance in these departments has proved invaluable. Although his services are of great benefit to certain people who are ill, his main work is still among those who are not under their medical adviser for any reason. Perhaps it is because of this that his field of work, until quite recently, has been outside the hospital and rather unknown to the general medical practitioner.

Now, as in every branch of medicine and its auxiliary services, the chiropodist is becoming more and more interested in the preventive aspect, with the emphasis on children. It is generally considered that most foot troubles start during the growing period and that because pain is usually absent at this stage, the early distortions are unrecognised. The chiropodist is not yet utilised in this field to anything like the degree he should be, for it is surely more rational to obviate defects than just to relieve the effects arising from them in later life. It was discovered in a recent school survey that hallux valgus is prevalent in a high proportion of children while still at school (43 per cent.) and that 37 per cent. of these children had corns by the age of 15.[1] The obvious function of the chiropodist would appear to be that of co-operation with the school medical officers to discover these cases early enough in order that treatment should be at its most effective. In addition, experienced chiropodists can give valuable lectures to women's organisations on the care of the feet, giving particular attention to the shoes and socks of small children before they have reached school age.

The chiropodist is frequently in the position of being the first person to notice certain things about his patients which are indicative of constitutional disorder but which would not necessarily send a patient to his medical adviser. A patient may complain of feeling as if he is " walking on cotton wool or sponge rubber " which may be a sign that he had combined degeneration of the spinal cord ; or the chiropodist may have a great deal of difficulty in healing what appears to be an ordinary-looking septic lesion. This type of patient may have diabetes without being aware of the condition. So that it is not infrequent that the chiropodist may be the cause of a patient seeking medical advice. It is therefore most important that the chiropodist should have sufficient knowledge, which calls for a high sense of individual responsibility, to be able to recognise the symptoms and signs of more serious conditions.

Advancing years usually bring increased pain and immobility, an aspect which has been pointed out forcibly by Sheldon's[2] report on Old People. By keeping the aged on their feet the chiropodist is not only performing a social and humanitarian service, he is also rendering an important service to the doctor, whose function it is to promote healthy activity. It may also be a dangerous period when arterial conditions develop, and it is here that the chiropodist becomes a valuable auxiliary to the doctor, for he is trained to safeguard the feet and to keep alert for changes which require medical or surgical attention.

The majority of chiropodists are in private practice, but it is essential that as many as possible should be associated with a hospital while carrying on their practices. It is helpful for any auxiliary profession that there should be opportunities to keep in contact with current medical opinion, for medical auxiliaries like the senior professions themselves, must refresh themselves intelligently if they are to progress and keep their enthusiasm alive. The thoroughly trained chiropodist, generally speaking, is a most enthusiastic person who is deeply interested in his work and who devotes his energy to seeking methods of providing relief from pain. The appreciation of the patient is witness to the skill and thought which he gives to his profession. His field is vast, for a foot cannot be dissociated from the rest of the body or from many of the ailments to which it is subject. His work should therefore bring him into close contact with the doctor whose co-operation would be to his and the patient's advantage.

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[1] West Riding and Ealing surveys.

[2] J. H. Sheldon, M.D., F.R.C.P.: "The Social Medicine of Old Age."

With the further development of the medical auxiliaries' services following the recent investigation by the Ministry of Health, there is no doubt that the ability of the fully-trained chiropodist to make an important contribution to the health of the community will be more clearly understood and that his services in the future will be utilised to the full.

Correspondence

Rugby

SIR,—On 8th November I was fortunate enough to go over to Cambridge and see the Springboks give Cambridge University an exhibition of brilliant Rugby Football.

It brought back to me two memories—The exhibition of Guy's Hospital R.F.C. gave on the same ground during the previous season, and the kind of Rugger that Guy's used to play in the era after the first world war—memories of W. D. Doherty, Frans Becker, and Van Schalkwijk.

I wondered what was the cause of the decline.

I admit that around 1930 St. Mary's Hospital were endeavouring by all means to attract Rugby players to their Hospital. They succeeded—and the mantle of Guy's fell on St. Mary's. I wondered what those in authority thought, and did about it.

I formed the impression that there was a time when those in Authority considered that Academic ability was the thing of importance at Guy's. I agree with them—but—not every student has the ability to rise to Academic heights. It is the duty of a hospital to turn out material for every sphere of Medicine. In the past the majority of men finished up in General Practice. A man with a one-track mind is at a disadvantage in this branch of the profession.

Sport has the advantage of enlarging a man's sphere of interest and the contacts that he makes with his fellow beings are improved by this factor.

A final word for those who have the good sense to play Rugger. Don't think you can excel by playing one game a week, and by doing nothing else. It is essential, if one cannot get at least two games a week, that one afternoon a week is spent in serious training of every aspect of the game. We always used to try to get one evening in the gymnasium as well, but concentrated practice is vital to get the necessary dash and speed of decision, which is essential for a man to rise above the average.

And lastly, even if the gates at Honor Oak Park are not what they used to be, remember that there is a large unseen following of old Guy's men, who even if they did not play Rugger themselves, follow the fortunes of the teams with an unswerving loyalty.

Get to it, Guy's !

Yours, etc.,

J. R. F. POPPLEWELL.
(Guy's 1926–31.)

Rugby

SIR,—May we on behalf of the Selection Committee of the Rugby Club use the columns of the *Gazette* to appeal to past members of the Hospital for their assistance in the running of the Club ?

Each week all members of the Selection Committee are themselves playing in matches and cannot witness the capabilities of all players in the Junior sides. For this reason the Committee would be exceedingly grateful if any former Guy's men could watch the Junior games and report on them to the Committee.

We would ask those people sufficiently interested to contact us as soon as possible. Junior fixtures for each Saturday are published beforehand in the *Gazette.*

Yours, etc.,
C. W. POOK, *Captain.*
E. O. JAMES, *Hon. Secretary.*

Gramophone Recital

SIR,—I would like to bring to the notice of your readers a Concert to be given by the Guy's Hospital Music Club on Wednesday, December 5th, at 7.30 p.m., in the Physiology Theatre. The programme is as follows :—

Mass No. 1 in C Major	*Mozart*
Piano Concerto No. 23 in A Major, K.488	*Mozart*
" Messiah " (Part I)	*Handel*

To all members and friends of Guy's Hospital I would like to extend an invitation to be present. There is no charge for admission, but a collection will be taken during the interval to defray expenses. Tickets for reserved seats may be obtained on application to the Secretary.

Yours, etc.,
C. PETER BRIGGS,
Hon. Secretary.

The Landon Children's Tea Party

SIR,—The Landon Children's Tea Party will be held in the Out-Patient Department this year at 3.30 p.m. on Saturday, December 22nd, at which 200 children will be entertained.

In the past it has been customary to appeal to business firms in the neighbourhood for subscriptions towards the cost of this annual event. Under the present regime, hospitals are not allowed to appeal for funds, but there are many members of the Hospital Staff who have helped this cause in the past, and I have no doubt would like to continue to do so.

This tea party has been an annual event since 1897 and any member of the Staff will be welcome who cares to come and see the entertainment in progress.

Yours, etc.,
PHYLLIS E. BIRD,
Hon. Secretary,
Landon Tea Fund.

G. D. ECCLES

(Died July 24th, 1951)

G. D. has gone
With those compelling eyes.
For his own good.
So often most unwise.
But always a doctor.
The sort they breed at Guy's.
H.L.

Reviews

Manual of Massage and Movements. By EDITH M. PROSSER. Faber & Faber. *Price* 15*s*.

The early part of this book contains useful information on the History of Massage, Classification, Technique, effects and uses of massage. But in the light of present-day knowledge, some of the claims would appear to be rather extravagant.

The chapter of Mechanics might be expanded to include—force ; friction ; inertia ; velocity ; acceleration ; momentum ; timing ; rhythm ; and duration of movement.

The section on movements, however, requires drastic pruning to bring the book into line with the pamphlet on " Notes on the Syllabus of training in exercises for the examinations of the Chartered Society of Physiotherapy " which was published recently. S.M.E.

Medical Disorders of the Locomotor System. By ERNEST FLETCHER. 2nd Edition. Livingstone. *Price* 60*s*.

This book makes a plea for the recognition of yet another specialist. His main interest will be the rheumatic disorders, but he will take from the general physician diseases of bone and peripheral vessels ; from the orthopædist many minor maladies ; and from the neurologist the peripheral neuropathies. One hopes he will not be called the locomotorologist. In this field the present work is unchallenged. Well produced and illustrated, it gives detailed and balanced accounts of the subjects discussed and there are adequate references.

Opinions differ on the importance of good writing in a medical textbook. At least one reader is irritated by such strange practices as the frequent use of commas in place of full stops (" Osteo-arthritis may also occur in Gout, the probability is that it is here due to chemical deposit and injury."), or the scattering of inverted commas in a vain attempt to infuse sense into a nonsensical statement (" the ' butterfly rash ' across the face is an ' essential ' part of the syndrome but is not always present."). J.C.H.

Muir's Textbook of Pathology. Revised by DR. CAPPELL. 6th Edition. Arnold. *Price* 50*s*.

In the 6th edition of this book Dr. Cappell adheres to the general pattern established by Sir Robert Muir in previous volumes. The chief morbid processes are discussed first followed by the various systems of the body with the diseases to which each is subject. This makes for greater clarity of reading and should help the student to orientate his ideas before absorbing further detail. There is an admirably concise account of the rhesus factor and a particularly valuable section on fluid balance and the pathology of œdema. The illustrations throughout this book are of a high standard. In the chapter on the central nervous system numerous microscopic brain sections allow the reader to study the post-mortem appearances of the more common pathological conditions. This book can be recommended for the use of those beginning their preclinical studies and for the student wishing to consolidate his knowledge before the final examinations. K.F.A.

Clinical Pathology Data. By C. J. DICKSON. Blackwell. *Price* 4*s*. 6*d*.

A useful but not essential booklet.

Brompton Hospital Reports, Vol. XIX, 1950. Research Department, Brompton Hospital. *Price* 12*s*. 6*d*.

This further volume of the well known Brompton Hospital Reports adequately lives up to the standard of its predecessors. To select particular articles for praise would be not only invidious but extremely difficult. We therefore recommend the book as a whole. G.

Favourite Prescriptions. Edited by SIR H. OGILVIE and W. A. R. THOMSON. " The Practitioner." *Price* 4*s*. 0*d*.

A delightful little book giving a glimpse of real traditional practice as distinct from academic pharmacology and therapeutics. G.

Memories of Guy's

By A. R. THOMPSON, Ch.M., F.R.C.S.

Consulting Urologist, Guy's Hospital

V. OTHER HOSPITALS AND PERSONALITIES

(*Continued*)

AS a student at Guy's and, especially, while I was working for the final fellowship examination, I took the opportunity of going round other hospitals in London. At these I learned of different methods of working and teaching than those to which I had become accustomed. I also studied the peculiarities of some of the well-known people I encountered, peculiarities of teaching rather than personal characteristics. I saw and heard many of the most famous teachers in the capital at the beginning of the century and encountered others who became famous later. In 1900, when competing for the prize which was offered annually by the Physical Society, I had occasion to look up the question of the treatment of perforated gastric ulcer. I took a great deal of trouble about the investigation, but not about the arrangement of the paper itself, and I was duly disappointed when the students' committee decided that the paper was not up to standard. Though I was the only contributor the medal was not awarded that year. I ventured to address Mr. Jacobson on the matter. He very kindly read through my paper and, one Sunday afternoon, at his invitation, I saw him at his house in Cumberland Place. He informed me that he was not in the least surprised that I had not been awarded the medal for, as he pointed out, I had introduced fresh subjects time and again without any attempt at continuity. In addition, my writing was blunt and showed no tact. The facts were there, admittedly, but the take-them-or-leave-them attitude that I had adopted was far from calculated to mollify either my readers or my judges. Jacobson took a very great deal of trouble on my behalf and, after my first interview with him, asked me up to his house on two or three occasions in order that, under his supervision, I might lick the paper into some kind of presentable shape. Having done this for me he then went on to say that he would put it into the Guy's Hospital Reports, of which he was at that time the editor. So it appeared in print. As this was my first published paper, I was naturally very proud and to Jacobson, above all, I owe a very deep debt of gratitude.

I mention this paper because in order to collect cases for it I frequently went to the London Hospital and worked there in the surgical registrars' room. I met, in this way, two distinguished juniors, later to achieve wide renown, one Lord Dawson of Penn, and the other Sir Hugh Rigby. Nothing could have been kinder than the way in which they treated me. They belonged to types of men of whom I had no previous knowledge, and I learned much from them. Across the years their presence shines with a very bright light.

Later I went to the London Hospital in connection with the investigation of reports on post-mortem cases of genito-urinary disease and from these I have not yet finished receiving instruction. The pathologist then at the London Hospital was most kind and helpful and allowed me every facility and comfort. His reports of findings are amongst the best things I have ever read, though in some of his remarks upon congenital defects of the urinary organs one seemed to see the face, and hear the voice, of Arthur Keith, in addition to that of the pathologist himself, Turnbull.

I heard two surgeons teach at the London Hospital ; Sir Frederick Eve and T. H. Openshaw. Sir Frederick had done good work at the museum in Lincoln's Inn Fields, especially in connection with cysts and other diseases of the jaws, and had been, in England, rather a pioneer in the surgical treatment of gastric conditions. He showed a case of popliteal aneurysm on one occasion and discussed its appropriate treatment. But he did not teach students so well as when he was writing for instruction and I was not altogether impressed by his ward rounds. He was examining at the College at this time and, in consequence, had a very good following of students. One cold autumn morning I sat at the feet of T. H. Openshaw who, like Horrocks at Guy's, was an obvious Lancastrian, but very much more refined. (I say that he was an obvious Lancastrian for, to a Yorkshireman, there are at least two Lancastrian characteristics. Directly after one crosses the borderland between the two counties one is constantly meeting, especially on a bank-holiday, crowds of girls with not a single man among them. The other characteristic is the sharp vocal emphasis always laid on the final " g " in words ending in " ing ", so that it sounds more like a " k ".) To return to Openshaw and his teaching, I particularly remember one thing he said, namely, that in those days massage was responsible for many false joints after fractures of both bones of the forearm.

There was also then a physician at the London Hospital who calls for special comment. In his smart and shining top-hat and well-fitting short square jacket, that Fripp knew so well how to wear, he looked not unlike a successful bookmaker. He rarely recollected a student's face, but attained considerable popularity none-the-less. His plan was simple. At some such function as an annual dinner he would see some student whom he ought to know. At once he consulted a colleague, such as William Wright, the Dean of the Medical College, who knew almost every student at a glance. The physician, then armed with all the essential information, at once retraced his steps, found the man, and conversed kindly and knowingly with him about his practice, his family, and his life, only to forget him completely just as soon as they parted company.

From the London Hospital, which I always loved—except when meeting its football team in a cup-tie, let us go first along Great Eastern Street and then by Old Street, passing on our way the old building of St. Luke's Mental Hospital and, when we have reached Smithfield, turn south and enter the main gateway of St. Bartholomew's Hospital. One must tread gently here, for it was through this very same gate that Sir James Paget used to walk every Sunday with his charming children, having come down all the way from Harewood Place, north of Hanover Square. I say his children were charming, but I know them only through their books, for one of the best " lives " I have ever read is that of Bishop Luke Paget of Chester, written by his wife. The great Pott and the cynical Abernethy had likewise trodden this route. For all its reputation, however, the very worst operation I have ever watched was performed at St. Bartholomew's. Two surgeons of European reputation were the principal characters and a well-known anæsthetist was playing a part, but in a very inefficient way. Across the years that operation, with its thorough badness shouts with an increasing stridor.

At St. Bartholomew's, as at other hospitals, the heads of the departments of gynæcology and obstetrics were M.D., F.R.C.P., and, as they were physicians, they were allowed to operate only through the vagina. Hence this bastard way of removing abdominal tumours. A surgeon on the staff, an M.S., F.R.C.S., was told off to do the necessary abdominal operations for those gynæcological conditions which were amenable to surgical methods. The vagina offered a difficult and thoroughly septic route in those days. I am glad to say that this rule was not observed at Guy's and both Horrocks and Galabin, despite their medical rather than surgical qualifications, operated by the abdominal route if they wished to do so.

But, this rule apart, let me recur to the story of the worst operation that I have seen. Obviously I cannot give the names of those involved ; all are dead. The first surgeon was a man who made his money in other walks of life ; the other was a blunt, honest individual who killed himself with work, night and day, because he refused obstinately to trust his assistants—a stupid error for they were perfectly competent people. On this fateful day, which I so clearly recall, the senior surgeon started the operation even before his junior colleague arrived, and also before the induction of the anæsthetic was complete. It remained at this low level throughout the operation, if such a term may indeed be used in reference to this appalling proceeding. The surgeon persisted in abusing his assistant in a manner that no gentleman would employ, and the assistant, for his part, with a temper that was none of the best, became peevish, obstinate and difficult to a degree. The case was that of a simple ovarian cyst. I cannot be altogether sure that the cyst was in fact removed, for such was the hæmorrhage provoked that the operating field was obscured completely. But I well recollect how the assistant surgeon wiped out huge clots of blood and how the patient started to vomit. The operation, if it could be dignified by such a name, was eventually finished, and the two surgeons parted company in absolute silence, each looking like a naughty child who had lost his temper and was not prepared under the circumstances to admit his own obvious errors. At all events, the lesson is obvious ; when things are going wrong with yourself, never start an operation that is not urgent. The consequences may be too serious.

But I have seen in the ordinary way most beautiful and very successful operations at St. Bartholomew's, notably those of the late Mr. C. B. Lockwood, and Sir William Girling Ball. I heard Mr. Bruce Clarke demonstrate a case of enlarged thyroid and I learned from him then that certain of the symptoms of exophthalmic goitre might well occur with, apparently, an ordinary enlargement of the gland in question. When only a few of the recognised symptoms were present the case should not necessarily be diagnosed as one of exophthalmic goitre. I met Bruce Clarke later in my life in connection with that meeting of the International Association of Urology which was held in London in 1911.

He was a very pleasant man, a first class urologist as well as general surgeon. One day, at the Old Bailey, there was a trial of a man for, I think, manslaughter. The judge who tried the case asked to see the weapon with which the killing had been done. It transpired that the prisoner had a urethral stricture for the dilatation of which Bruce Clarke had provided him with a heavy metal bougie. It had been used, indeed, for delivering the mortal blow to the dead man's head. " A very dangerous-looking instrument," was the judge's remark when he saw it. I have often wondered if Bruce Clarke was put on his trial for being an accessory before the fact. He wrote a work dealing with some aspects of urinary surgery and I recollect one point on which he laid particular emphasis. It was that people with simple renal stone (by " simple ", I mean unaccompanied by gross sepsis), often suffered from general ill-health. The secretary of a children's hospital on the staff of which I at one time served told me that after Mr. (now Sir) Darcy Power removed a calculus from one of his kidneys, the main thing that he noticed was the very great improvement in his general health that followed. There is a story which, admittedly, does not sound quite true, of Jacobson and Bruce Clarke. Both were Oxford men. The mastership of surgery had been instituted recently at that university and both of these men went up for the necessary examination. But, owing to its novelty there was, for some strange reason, no examiner present. It was agreed, therefore, that the candidates should examine one another. After winning the toss, or whatever plan was adopted for deciding who should be the first candidate, Bruce Clarke examined Jacobson and let him through. When it came to Jacobson to examine Bruce Clarke, however, he proceeded to plough him !

I saw Lockwood on one occasion remove a large mass of secondary glands associated with a cancer of the penis. The mass was situated in the inguinal and femoral regions and required a nice knowledge of anatomy which, of course, Lockwood possessed. It called, as well, for very considerable surgical skill, which was also at his command. The operation occupied a long time, but was safely accomplished. I fancy that Lockwood was the subject of stories similar to those told of Jacobson. He was the only living British Anatomist who had a structure in body named after him during his life—" the ligament of Lockwood." Situated in the orbit this had been the subject both of his careful dissections and of a paper published in the Journal of Anatomy. He was, as I have indicated, very particular about asepsis, and once blew me up for carelessly coughing in the operating theatre. A humble apology was met with the remark that one should not talk in the theatre.

Tom Smith, or rather Sir Thomas Smith, I saw once entering the Royal College of Surgeons. He was big, strong, and handsome and had done good work in his day. Paget I once saw in a wheeled chair in Park Square in 1899. About 1923 I saw a farming lady from the county of Southampton, who had been seen by Paget when she was a tiny baby. He had diagnosed some congenital condition of the kidneys, possible cystic, and I saw her at the request of her doctor. She was then over forty and doing good work on her farm. But in quite a short time after she came to see me she died of uræmic trouble. The doctor very kindly sent me the kidneys and, though there was nothing cystic about them, they were both affected with chronic nephritis. The pelvis on each side opened near the lower pole and I do not doubt that this rare condition had led to some obstruction to the flow of urine, which in turn had given rise to the chronic nephritis. Paget was, therefore, right.

Three of the surgeons at St. Bartholomew's were well known to me. Harold Wilson was a colleague of mine at the Victoria Hospital and there was kind enough to help me with the best operation that I suppose I ever did. The case was one of spina bifida in the lumbar region, and this was associated with talipes equinavarus. I opened the sac and dissected the nerves away from the inner surface of the wall, which I then excised and united its edges. Primary union was insured and, after the wound had healed well, the baby lost its talipes. I wish that I had paid more attention to this case, as it was a really good one. Wilson was an excellent teacher, especially of clinical surgery, and obtained the Jacksonian prize for his work on the moveable kidney. I wonder what he thinks of it now. When he subsequently published this study as a book it had the misfortune to synchronise with the revised view that the mobility of the kidney was seldom responsible for the symptoms with which it was frequently associated. Operation, therefore, was neither demanded nor deserved. I should doubt if I have done five operations for moveable kidney in twenty-six years at Guy's Hospital and the very large number of methods of operation seem to me to indicate that none was very beneficial. A number of successes were nevertheless claimed for this extraordinary manœuvre. A critical " follow-up " was probably lacking in the majority of such cases.

Of Girling Ball it is difficult for me to say anything without being laid open to the accusation of sycophancy. The confidence of the public in him has been shown by the huge amount of money that he collected for the building of the present magnificent school at St. Bartholomew's, now, alas, so severely damaged by bombs. This building is situated near the old Charterhouse. The confidence of the profession has been shown by his election to the Council of the Royal College of Surgeons, and to the Presidency of the Royal Society of Medicine. And yet to talk to him and to hear his replies might indicate that he had no care or anxieties whatever.

Good luck has come to him because he has worked hard to deserve it. May long life and one other honour crown his magnificent career. I had the pleasure of going round with him one day in the summer of 1939, before the war disturbed the current of one's thoughts. His teaching was direct and to the point and there was plenty of fire in his words. His rapid diagnosis of a perforated duodenal ulcer and the beautiful operation that he performed for it sent to me my lodgings in London a sad and chastened man. I should place his ability as equal to that of Ogilvie and in his bonhomie he was truly unique. What an asset, even at a dying man's bedside, and what a presence to have by the side of a patient whenever there was the slightest chance of life.

The third surgeon whom I knew at St. Bartholomew's was Blakeway who, like Wilson, was a colleague of mine at the Victoria Hospital. He died long before his time of toxic influenza and pneumonia. He knew the direction of his road, but travelled all too short a distance along it. I also met Etherington-Smith who had stroked the Cambridge boat in 1907 and, a greater feat, had stroked the Olympic crew at Henley. The oarsmen with him in the latter event were mostly aged men and, though they knew how to row, the stroke knew that he must not exceed a certain rate of striking. I believe he kept them going at under thirty-five to the minute and the race was won by England. The coolness and patience of the man who could do this must certainly have been sublime. He died just before the war began in 1914 from, I have heard, a strangulated obturator hernia. His arteries were those of an old, old man, but for strength and beauty of form he was an Adonis, and it really requires a Vergil to sing of his prowess. He was a very good operator and had just got on at St. Bartholomew's when death summoned him away.

Before leaving this hospital one should always go and visit the great priory church of St. Bartholomew the Great. It is a stone's throw away. If you have a free Saturday or, if you have not, make one so and visit, as I did, the abbey at Waltham. While this has only its nave, the church of St. Bartholomew has only its chancel. Join the two together and you have a splendid and complete church. The approach to St. Bartholomew the Great is wretched. It is what we should call in the north a " ginnel ". This poor approach is surpassed for indecency and inappropriateness only by the groined arch at Westminster School, which I never saw without the accompanying decoration of sanitary bins, sometimes full and sometimes empty. When walking home from Guy's by Westminster I have often gone to see this arch in order to try and reconstruct the past and to imagine the men and boys who have passed under it, prior to the advent of the bins.

We must now put all such thoughts sway from us and take a walk along the embankment thence across Westminster Bridge remembering that, when there is a sunset on an autumn day over Chelsea, " Earth has not anything to show more fair."

To be continued

December		ACADEMIC
		Exhibition. Surgical Department. " Incisions and Suture Materials."
3rd	1.00.	Mr. Batchelor. Clinical Lecture.
	5.00.	Surgical Department. Film. " Operation for the Repair of Inguinal Hernia by ' Tanner's Slide ' Method." Clinical Theatre.
6th	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
7th	1.00.	Dr. Grant. Clinical Lecture. " Some Remarks on Urticaria."
8th	10.00.	Mr. C. Price Thomas, Westminster Hospital. Surgical Departmental Round. Clinical Theatre.
11th	1.00.	Dr. Bishop. Clinical Lecture. " Disorders of the Adrenal Cortex."
12th	4.45.	Science Club. Dr. P. R. Evans and Dr. D. G. Vulliamy. " Autonomic Disturbances in Pink Disease." Staff Common Room. (Tea 4.30 p.m.)
17th	1.00.	Mr. Cook. Clinical Lecture. " Genital Tuberculosis in Women."
20th	1.00.	Sir Heneage Ogilvie. " Failures of Gastric Surgery."

December		SPORT AND SOCIAL
6th	6.15.	Fencing-4 Foil *v.* St. Bartholomew's Hospital. (H.O.P.)
8th		Rugby 1st XV *v.* Old Cranleighans. (Thames Ditton.) Rugby "A" XV *v.* Lewes. (H.O.P.) Rugby Extra "A" *v.* Aylesford Paper Mills. (Aylesford.) Rugby Wanderers *v.* Motspur Park. (H.O.P.) Rugby " B " *v.* Lyons "A". (H.O.P.)
10th	6.30—11.30.	Students' Union Christmas Dance. Nat Temple and Orchestra. Seymour Hall.
15th		Rugby 1st XV *v.* Moseley. (Moseley). Rugby "A" XV *v.* Norwich. (H.O.P.) Rugby Extra "A" *v.* Thurrock. (Stanford-le-Hope.) Rugby Wanderers *v.* Thurrock "A". (H.O.P.)
17th	7.00.	Fencing-4 Foil *v.* King's College Hospital. (Away.)

Sport

RUGBY

Guy's *v.* Birkenhead Park

At Birkenhead. Result—Lost 3—14
10th November, 1951.

Birkenhead Park fielded their strongest side of the season against Guy's and in the first half their heavier and experienced pack brushed Guy's off the ball. Apart from a few breakaways and some lengthy touch kicking by Howells at full back, Guy's were penned in their own half. When the passing of the Park three-quarters broke down the Guy's forwards did not seem to possess any fire nor the will to go through and the rushes were soon checked. Towards the end of the first half the Park scored three tries in quick succession and had a nine-point lead at the interval.

In the second half Guy's pack played a little less raggedly but slow heeling handicapped Rankin at scrum half. When the ball reached the three-quarters Kingston at centre made little headway in trying to probe the middle defence of the opponents. Near the end Birkenhead Park scored a converted try and in the final minutes Howells landed a penalty goal for the Hospital.

Altogether this was an unsatisfactory performance which cannot be attributed to the long hours spent travelling on the morning of the game. The forwards showed slackness and the defensive play on the wings was at fault.

Team : W. J. Howells ; E. O. James, J. C. Kingston, S. C. C. Scott, G. B. Middle ; G. D. Thomas, G. L. S. Rankin ; C. T. M. Wilson, D. L. H. Clark, N. A. Labuschagne, J. C. Burt, C. W. Pook, H. C. Meredith, J. W. Kirkbride, D. P. Honey.

Guy's *v.* Cambridge University

At H.O.P. Result—Lost 6—14

14th November, 1951

In this game D. K. Fairweather came into the front row and Labuschagne took over as hooker. Kirkbride played in the back row.

The Hospital team showed much more punch than on the previous Saturday scored first through a try by Middle. After seizing on a dropped pass Middle ran up the left touchline before crosskicking. Several forwards were up on the ball but the bounce eluded them and it was finally Middle who touched down. Howells' attempt at conversion hit the upright. Cambridge soon equalised when their full back fielded a wild kick just outside the Guy's 25 and dropped a goal. Almost immediately the Hospital went further ahead when Howells kicked a good penalty goal from fully 40 yards. Cambridge equalised soon afterwards from one of numerous penalties awarded for scrum infringements. There was no further scoring in the first half. Cambridge had much more of the ball, particularly from the line-outs but the inability of their backs to handle properly nearly led to Guy's scores on more than one occasion.

In the second half the Guy's forwards continued to play valiantly although Cambridge were giving an astute lesson in line-out play. On the few occasions the Guy's backs got the ball they gained ground—but that was all. In the last quarter of an hour the Cambridge team by virtue of their superior fitness, got the upper hand and scored two tries, one of which was converted, and thus clinched the match.

The Guy's team showed a great improvement on previous form, but too many penalties are being given away, and if they don't yield scores to the opponents, they mean a considerable loss of ground each time.

Guy's *v.* Rosslyn Park

At H.O.P. Result—Drawn 0—0

17th November, 1951

Rosslyn Park brought a strong side to Honor Oak Park including one international forward and several county players, but it was the Hospital which took the honours in a game which ended with neither side being able to score.

For the first twenty minutes of the first half it was all Guy's and the game was played in the opponents' half of the field. The Guy's pack was superior to the Park and it was only over-keenness on the part of the forwards, resulting in numerous penalties for Rosslyn Park, which enabled the Park to keep their line intact. When Rosslyn Park did have the ball Cremin at wing forward for Guy's saw to it that the ball did not go beyond the fly-half. At full back Howells distinguished himself with perfect positioning and excellent kicking.

In the second half slight rain made the poor conditions even worse and play deteriorated. Howells went near with a long-range penalty goal and the Park's attempt at keeping the game close gained ground slowly. Their efforts at scoring from short kicks ahead were fruitless and no scores resulted.

This was a game in which defences largely predominated and that together with the wet and muddy conditions were responsible for the absence of open play.

Guy's *v.* University College, Dublin

At H.O.P. Result—Won 3—0

19th November, 1951

Due to heavy rain over the week-end this game was played on the "A" XV pitch which had suffered lightly in comparison with the main pitch. Guy's were playing their fourth game in ten days and came out of it with great credit.

As against Rosslyn Park, opening play took place in the opponents' half of the field. On the occasions when the Dublin three-quarters did get the ball they showed themselves to be dangerous and they needed a lot of stopping. Scot had to leave the field for a short while with a cut eyelid but the seven Guy's forwards kept out the Irishmen during that period. Thomas at fly-half gained a lot of ground with his touch kicking. There was no scoring in the first half.

In the second half the standard of Guy's pack play reached great heights with Pook, Wilson, Meredith and Fairweather outstanding. Cremin also gave their fly-half close attention when it was necessary. On one occasion when the Dublin forwards did retaliate, their right wing unfortunately knocked down the corner flag. When play swept back into their 25 a Dublin defender was caught with the ball over his line and from the ensuing scrum Howells, who had moved up to fly-half for the purpose, dropped a goal to give Guy's victory about four minutes from the end of the game.

A" XV Results

17th Nov. *v.* **Rosslyn Park "A"** (Away)
Result—Lost 3—10

24th Nov. *v.* **London Irish "A"** (Home)
Result—Lost 0—6

CHESS

Guy's *v.* St. Mary's

Result—Lost 4¼—1½

UNITED HOSPITALS' AMATEUR BOXING CLUB

Fixture List, 1951–52

October	19th, Fri.	University of London Trials and "Harry Preston" Cup Competition (Holders London Hosp.)
November	9th, Fri.	Oxford University. (Home.)
,,	23rd, Fri.	Army Officers. (Home.)
December	7th, Fri.	Civil Service. (Home.)
January	18th, Fri.	Royal Navy Officers. (Home.)
,,	31st, Thur.	Cambridge University. (Away.)
February	13th, Wed.	Inter-Hospitals Boxing Championships. (Seymour Hall.)
,,	23rd, Fri.	University Athletic Union Championships. (Sheffield.)
March	7th, Fri.	University of London Championships for the Blott Cup. (Place to be announced later.)
,,	14th, Fri.	Royal Air Force Officers. (Home.)
March April.		Territorial Army. (Date and details to be arranged.)
May	9th, Fri.	Civil Service. (Away.) (King Edward Buildings, E.C.1.)

N.B.—All home matches will take place in the Gymnasium, St. Bartholomew's Hospital Medical College, Charterhouse Square, Smithfield, E.C.

House Appointments

1st DECEMBER, 1951

ASSISTANT HOUSE SURGEONS.

To Mr. Slesinger : Mr. E. J. Rolls.
„ Mr. Wass : Mr. G. B. Davison
„ Mr. Blackburn : Mr. G. E. Sharp.
„ Mr. Lawrie : Mr. J. Palmer.
„ Mr. Glover : Mr. P. F. P. Lansdown.

Appointed for six months, the first three months as A.H.S.

OUT-PATIENT OFFICERS.

Mr. W. G. Davies.
Mr. A. S. Harris.
Mr. P. V. Skinner.
Mr. P. A. Zorab.
} *3 months.*

HOUSE SURGEONS.

To Sir Heneage Ogilvie: Mr. J. W. Goodfellow.
6 months.

„ Mr. Massie : Mr. J. C. C. Kendall.
3 months.

„ Mr. Eckhoff : Mr. W. V. James.
6 months.

„ Mr. Atkins : Mr. J. W. Bradbeer
3 months.

HOUSE PHYSICIANS.

To Sir John Conybeare Mr. W. Vans Agnew.
and Dr. Hardwick : Mr. D. B. Amos.
3 months.

„ Dr. Boland and Mr. D. J. Stoker.
„ Dr. Baker : Mr. J.-C. Gazet.
6 months.

„ Dr. Hampson and Mr. G. A. E. Baker.
„ Dr. Kauntze : Mr. G. A. Taylor.
6 months.

„ Dr. Douthwaite and Mr. J. R. Rees.
„ Dr. Mann : Mr. J. H. Bailey.
3 months.

RESIDENT OBSTETRICIANS.

1. 9.51—29. 2.52 : Mr. H. M. Baird.
1.11.51—30. 4.52 : Mr. J. Taylor.
1. 7.51—31.12.51 : Mr. W. H. Watson.
1. 1.52—30. 6.52 : Mr. W. M. E. Tweed.

OPHTHALMIC HOUSE SURGEON.

Mr. S. Singh. *3 months.*
(Non-Resident)

THROAT AND EAR HOUSE SURGEON.

Mr. G. M. Karpusheff. *3 months.*

DERMATOLOGICAL HOUSE PHYSICIAN.

Mr. C. H. Wilkinson. *3 months.*

NEUROLOGICAL HOUSE PHYSICIAN.

Mr. K. W. Gray. *3 months.*

GENITO-URINARY HOUSE SURGEON.

Mr. D. R. Pugh. *3 months.*

CHILDREN'S HOUSE PHYSICIANS.

Mr. E. J. Masters. *3 months.*
Mr. A. S. F. Butcher. *3 months.*

HOUSE SURGEON TO THE THORACIC UNIT.

Mr. S. H. Richards. *6 months.*

HOUSE SURGEON TO THE NEURO-SURGICAL UNIT.

Mr. J. G. Hamilton. *3 months.*

RESIDENT JUNIOR CLINICAL PATHOLOGISTS.

1.10.51—31.3.52 : Mr. J. A. J. Smith.
12.10.51—11.4.52 : Mr. J. T. Cecil.

HOUSE PHYSICIANS IN THE YORK CLINIC.

1.11.51—29.2.52 : Mr. J. L. Hayward.
1. 9.51—29.2.52 : Mr. P. J. F. Walsh.

RESIDENT ANÆSTHETISTS.

20. 9.51—19. 3.52 : Mr. P. S. B. Russell.
12.11.51—11. 5.52 : Mr. K. A. Baker.

R.M.O's., NUFFIELD HOUSE.

18. 9.51—17.3.52 : Mr. M. C. Gilbert.
8.10.51— 7.4.52 : Mr. A. Cumin.

ORPINGTON HOSPITAL.

House Physician.
Mr. H. Gold.

Throat and Ear House Surgeon.
Mr. P. L. Pelmear. *3 months.*

Orthopædic House Surgeon.
Mr. J. Woodford.

PEMBURY.

House Surgeon.
Mr. R. S. Wells.

QUEEN MARY'S, SIDCUP:

House Physician.
Mr. A. G. Spooner.

House Surgeons.
Mr. J. E. Blundell. *3 months.*
Mr. D. T. Lovell.

Hospital Information, etc.

APPOINTMENTS VACANT

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the following appointments to commence duties as soon as possible :—

Department of Preventive Dentistry :—

2 Registrars with attendance on 3 sessions each per week.

1 Registrar with attendance on 6 sessions per week.

Salaries will be at the rate of £775 per annum in the first year and the posts will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E. 1, to whom applications should be sent not later than **Friday, 4th January, 1952.**

GUY'S HOSPITAL AND MEDICAL SCHOOL

Applications are invited for the appointment fo **Surgical Registrar** (middle grade). Appointment to date from 1st January to 30th September, 1952, in the first instance. Forms of application, obtainable from the Superintendent's Office, should be lodged with the Superintendent not later than **11th December, 1951.**

GUY'S HOSPITAL STUDENTS' UNION

Christmas Dance at Seymour Hall, Monday, 10th December, 1951, at 6.30 p.m. Single Tickets 4*s.* 6*d.* each. Evening dress optional.

STUDENTS' UNION OFFICERS, 1951–2

President :	Mr. Patrick Clarkson, M.B.E., F.R.C.S.
Chairman :	Mr. T. B. Steven.
Hon. Secretary :	Mr. F. N. Rigby.
Hon. Treasurer :	Mr. I. M. Briggs.
Entertainments Chairman :	Mr. G. Pearson.

Representatives

MEDICAL

1st Year Med.	J. G. Allardice. R. M. Clark.
2nd Year Med.	I. Green. E. E. Smith.
3rd Year Med.	Miss G. M. Cann. B. L. Dodson.
Clinicals	J. Willis. W. P. N. Moore. K. Kelly. Miss J. Endean.

DENTAL

1st B.D.S.	Miss M. Fairfax.
Preclinical	B. Beeching
Prosthetics	D. Forman. D. A. Lambert.
Clinicals	M. D. Awty. D. J. Baynon.

PAPERS BY GUY'S MEN

Allsopp, C. B. Effects of Ultra-Violet Radiation on 3: 4-Benzpyrene. The Carcinogenic Activity of Water-Soluble Photo Derivatives when Used with Croton Oil as Co-Carcinogen. *Brit. J. Cancer*, 1951, **5**, 273.

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Marshall, Geoffrey. Individuality in Medicine. *Brompton Hosp. Rep.*, 1950, **19, 6.**

CHANGES OF ADDRESS

F. H. Brain, M.A., Ph.D., B.Sc., 24, Vine Court Road, Sevenoaks, Kent. Tel. : Sevenoaks 2245.

D. Davies, M.D., M.R.C.P., "Hedgerley," Duffield Lane, Stoke Poges, Bucks.

G. E. Hale Enderby, M.A., M.B., B.Ch., D.A., 11, Mansfield Street, London, W.1. Tels.: Langham 3132 (day) and Welbeck 6655 (night); and "Ashwood," Homefield Road, Warlingham, Surrey. Tel. : Upper Warlingham 2800.

D. F. N. Harrison, M.B., B.S., 32, Stow Park Avenue, Newport, Mon. Tel. : 4189.

J. V. Kilby, M.B., B.S., "Ferndale," Covington, Huntingdonshire. Tel. : Kimbolton 288.

R. J. W. Rees, M.B., B.S., 2, Woodside Grange Road, Finchley, London, N.12.

P. A. J. Smith, M.R.C.P., Dept. of Dermatology, Massachusetts General Hospital, Boston, Mass., U.S.A.

R. V. Warren, D.F.C., L.D.S., R.C.S., 11, North Parade, Penzance, Cornwall.

I. L. W. Williams, M.B., B.S., 28, Queen's Road, Sketty, Swansea.

BIRTHS

EVANS—On October 6th, 1951, at Guy's Hospital, to Hazel Christine (née Broughton), S.R.N., wife of Gwylyn M. Evans, M.B., B.S., M.R.C.O.G.—a son (David Kelk).

KETTLE.—On November 21st, 1951, at Kingston Hospital, to Eileen (née Plummer), wife of Reginald Gordon Kettle, Esq.—a daughter (Shelagh Diane), a sister for Terry.

DEATHS

NOOTT.—On November 20th, 1951, at a Bournemouth Nursing Home, Geoffrey Noott, M.R.C.S., L.R.C.P., J.P., of Dormy Hotel, Ferndown, Dorset, aged 66 years.

THOMAS.—On October 30th, 1951, Arthur Richard Thomas, O.B.E., F.R.C.S., Surgeon Rear Admiral, R.N. (retired), aged 75 years.

EDS. { R.G.
P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS

PUBLISHED FORTNIGHTLY

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PASSIM

ALTHOUGH the new Government is not yet in any position to state the extent to which its housing policy, with an emphasis on private residences, may lead to any change in its attitude towards the building of schools, factories and hospitals, it is nevertheless clear that restrictions in this respect are unlikely to be lifted for some time to come. Circumstances, in fact, dictate conservative measures. The prospects for an early start with the new Guy's are therefore not encouraging, despite the hopes that have been nurtured for a definite move in January, 1951.

Those of our readers who seldom visit the Capital must depend for their information largely on official announcements that are released from time to time and snippets of news so often inspired by rumour. They are denied those promising little delights that the denizens of the Borough have lately had the good fortune to witness. That erstwhile irregular and scarred site extending between the College and the " Miller," which for the last few years has served as little more than a battle-ground for the children (with plenty of brick-bat ammunition to hand), a chase for the dogs and a run for the urban poultry, recently afforded a scene of operations for a band of undeniable " prospectors." There they were, swarthy fellows, with grim expressions and powerful muscles, applying their determined efforts to the sinking of a bore-hole with a derrick and a pile-driver. Clearly, before adjourning to the Borough, they had faced the snows of the Yukon, the winds of the Steppes and the scorching sun of the tropics. Whatever could they be seeking here in London ? Was it gold, was it diamond or was it, maybe, uranium ? Discrete enquiries revealed otherwise, somewhat to our regret. The intentions were simple—to study the subsoil at the behest of the architects. Yes, they were the handmen of the pedologists, determined to see whether it should be upon rock, or upon sand, that the new Guy's should be established—Guy's House meanwhile, with its sorry buttresses and leaning floors, bearing all too eloquent witness to the dangers of inadequate footings on marshy land.

Their curiosity, apparently, was soon appeased. Then came signs of far more promising augury. Large track-laying tractors, thrusting relentless bulldozers before them, attacked the land with ferocity and determination. Before long all was levelled behind them. Could we then expect the excavators and concrete mixers to follow in their train ? Unfortunately, no. We were to be granted, instead, another car-park.

Yet this in itself represents a further advance. For the precise location of the focal point at the base of the central tower in the new " snow-flake " Guy's has at last been settled. It lies about the middle of that now largely disused road, Sparricks Row, running east-west alongside the College. The first spoke accordingly will extend north-east, in the direction of the long-lamented " Ship and Shovel." It will cover, as a result, the existing car park. Perhaps here, in 1952, the first stage of rebuilding will actually begin.

Meanwhile the provision of an alternative car park was a wise move. Yet if we may beg leave to offer a suggestion, it is that a modicum of covered accommodation for the shelter of vehicles might be provided. Materials, we know, are limited, but not ingenuity or resource in the face of real need. Many of those whose duty compels them to use the car park, by day and by night, during the winter especially, would welcome any little protection that might be afforded.

Smoking

By CHARLES BAKER, O.B.E., M.D., F.R.C.P.

A Clinical Lecture delivered in Guy's Hospital Medical School on 30th October, 1951

LADIES AND GENTLEMEN.—I must first warn you that the statements of an addict about his drug should always be received with scepticism. A social drug evokes emotional bias, and too many of the pronouncements about tobacco and alcohol clearly show either the hard dogmatism of the reformer or the easy tolerance of the habitué. There is, however, a fair sum of reasonable evidence, both from experiments and clinical observation, about the effects of tobacco on man in health and disease. It would perhaps be better if these brief selections and deductions from this evidence had been made by a moderate smoker, but I can at least claim that I have an interest in the subject and sympathise with patients not only when they ask for advice, which is frequent, but also when they disregard it.

Incidental to his discovery of America, Columbus discovered tobacco ; both have had far-reaching effects. It was in 1492 that he first met the primitive cigarette of tobacco leaf rolled in the shucks of maize, smoked by the Indians of San Salvador. The Spaniards took the tobacco plant back from the New World and its cult quickly spread throughout Europe, and later to the Near and Far East. The name of Jean Nicot, who introduced it to Catherine of Medici as snuff in 1561, was immortalised with the isolation of the main alkaloid in 1809, though the seductiveness of nicotine was later feminised by James Barrie. In 1565 it was brought to this country by Sir John Hawkins and was made popular by Sir Walter Raleigh who took the plant to Ireland and was himself a confirmed smoker. He was not deterred by feminine disapproval—he had secured the interest of Queen Elizabeth—nor by his valet who once doused him with ale to extinguish the internal fires. He smoked his last pipe while waiting to go to the scaffold. In the sixteen-hundreds tobacco was firmly established ; tobacco shops were as common as ale-houses, and pipes were provided in the first coffee houses ; children smoked in school ; Charles II had to prohibit Cambridge dons from smoking when they preached, and one parson smoked the church bell ropes when he was short of tobacco ; and the hangman of Gloucester complained that " men are too busy growing tobacco to be poaching or stealing sheep ". The popularity and tolerance of tobacco has continued in this country, though there have been transient changes, such as the reversion of the quality to snuff introduced by Beau Nash in the 18th century, and the dampening effect of Queen Victoria on smoking in polite society. In this century the consumption has increased enormously with the convenient cigarette, the power of advertising, and the woman smoker. This increase continues in the community, with the possible exception of one financially depressed group—medical students.*

The Conquest of Civilisation by Tobacco would make an interesting book and history makes it quite clear that we shall remain under its subjection. It has successfully withstood the decrees and punishments of autocrats, religious disapproval, legislation, taxation, and the strictures and warnings of the doctors. The Scotsman, James the First, provided a good example of the effect of official disapproval. His famous indictment of smoking as " a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to to lungs . . . resembling the Stygian smoke of the pit that is bottomless " had a big effect. Folk were curious, tried it themselves, and the habit spread throughout the country. He increased the duty by 4,000 per cent. and it was gladly paid by the new devotees of the herb, a reassuring precedent recently confirmed by our legislators. The prosperity of the tobacco-growing colonies

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*Following a clinical lecture by Dr. Boland in 1938 (Boland, E. R., *Guy's Hosp. Gaz.*, 1938, **52**, 225) a questionnaire was filled in by 123 students and subsequently analysed by H. F. Lunn (*Guy's Hosp. Gaz.*, 1939, **53**, 217). The number of non-smokers was 12 out of 123. At this clinical lecture a show of hands gave 65 non-smokers out of an estimated number of 170 present.

was assured, so much so that a few years later " ninety agreeable persons, young and uncorrupt " were exported to become wives of Virginian planters at a cost of 120 pounds of tobacco per head, a price which rose to 150 pounds two years later when another consignment of " sixty maids of virtuous education, young and handsome " followed.

In pharmacology Addiction is associated with Tolerance and there are many examples of this in the history of smoking, as the autocrats themselves were won over. In 1615 the Shah of Persia emphasised his opposition to tobacco by burning a merchant in his stock and making his offending courtiers fill their pipes with camel dung ; in 1670 a succeeding Shah enjoyed his pipe, as did his subjects of both sexes. In 1634 the Czar ordered whipping for the first smoking offence, execution for the second, and amputation of the nose for snuff takers ; in 1670 Peter the Great smoked and all prohibitive laws were abolished. In 1724 all Papal bulls against smoking were revoked by Pope Benedict XIII ; he was a smoker. In 1674, only a generation after Louis XIII, a snuff taker, repealed restrictive laws against tobacco, a State Monopoly was started in France. In 1917 this cleared £18,000,000, and official approval has been assured throughout the world since it was realised that increased smoking meant increased revenue. The anti-tobacconists have fought a losing battle whether uplifted by moral feeling or bolstered by current medical opinion. A fine example of this is the reformer, who in 1600 quotes,—" four people have died from tobacco within a week. One of them voided a bushel of soot,"—presumably a hæmatemesis. I do not think it is too great a digression from my subject today to have emphasised what a grip tobacco has taken of the community and the individual.

THE HABIT OF SMOKING

How has tobacco achieved this insidious, firm and unrelaxing grip on Man ? *Homo sapiens* has always responded to bizarre and flamboyant forms of behaviour and the ability to blow fire out of his mouth would clearly attract him, as it still does his imitative children. Though this is still a factor when we first learn to smoke, it cannot account for its world domination. If it were so, it would have been replaced by new fashions of display or confined to particular types of society ; instead it has been adopted successively by all and retained throughout the years. The social reasons for smoking are more real. Any two people who behave in the same way and have the same conventions are more likely to agree, and the ritual pipe filling, and the mutual production or fumbling for cigarettes, like the one-time elegance of the snuff-box, fill in the awkward gap before contact is made. The wish to imitate and to conform is the reason why most of us start to smoke, but only a few individuals continue with these drugs for social reasons only. For the remainder, which includes all the millions in the world who smoke heavily, tobacco is primarily used for its effect on the body alone and not for its social link. It is a personal drug.

The concomitants of smoking are pleasurable to the senses. The neatness of cigarettes in a well designed box or case, the grain of a seasoned briar, the efficient snap of the lighter, the blue curl of tobacco smoke, and the burning smell of the good cigar or well-ordered pipe, are attractive to the devotee. These are missed if smoking is stopped ; we are conditioned to them, and the sensations they evoke make the abstention more intolerable. Much, perhaps too much, has been said of the auto-erotic pleasure of smoking and certainly it is a pleasurable sensation to mouth a pipe even when it is empty, but this can hardly be a large factor in the smoking habit, and I doubt whether hæmatologists and other professional suckers have a great deal of this infantile stimulus in their work.

The main reason why we smoke is that tobacco contains nicotine and it is the absorption of nicotine into the body which is primarily the cause of the smoking habit. The pleasurable sensation that results is partly due to the act of smoking but it can also be achieved when nicotine is absorbed by other means, such as taking snuff or chewing tobacco, and has also been experienced when pure nicotine is injected intravenously or swallowed. The reason we continue to smoke is to reproduce the sensations and effects on our bodies produced by nicotine, and it is because we are used to this that there is discomfort when the habit is abandoned. It is only the very light and occasional smokers, and these are few, who can truthfully say that they smoke to be sociable or because it is fun. The rest of us do it to absorb nicotine. Though various aromatic substances are in part responsible for our choice of cigarette or brand of tobacco and therefore add to our pleasure, there is no evidence that any other constituent save nicotine is responsible for the sensations and the effects on the body of smoking. Other substances are absorbed in too small amount to have any physiological or pharmacological effect. Even the carbon monoxide which is absorbed does not cause a high enough saturation in the blood to have an effect even in heavy smokers, except possibly in airmen at very high altitudes if their oxygen apparatus failed.

Nicotine is a volatile fluid alkaloid, colourless and odourless when freshly prepared, but with a distinctive smell and brown colour on contact with air. The content of nicotine varies from 1 to 8% in the commonly used tobacco leaves, where it exists as the salts of organic acids. On burning the prepared leaf as in pipe tobacco, cigarette, or cigar, nicotine is liberated in pure form in the smoke. Only a percentage is absorbed by the smoker, for a cigarette which weighs 1 gm. contains 20 mgm. of nicotine, of which about 70% is puffed away in the smoke, 20% enters the mouth, and 10% remains unsmoked in the butt. Naturally the speed of smoking, the length of cigarette left unsmoked, and the amount of smoke which is retained in the mouth or inhaled into the respiratory tract will differ according to the smoker's habit. Clearly the smoker who sucks avariciously will absorb more nicotine than the one who just keeps the tobacco alight. The drier the tobacco the more quickly it will burn and more will be lost in the air, but with a wetter tobacco which burns more slowly and at a lower temperature, more nicotine is absorbed. The degree of moisture is, in fact, more important than the actual nicotine content of the tobacco in determining the amount of drug absorbed. It is important to realise that the unsmoked tobacco, whether in pipe of cigarette, acts as a filter so that the content of nicotine increases towards the stem of the pipe or butt of cigarette or cigar ; as it also tends to be wetter and cooler, the nicotine content of the inhaled smoke increases towards the bitter end.

The character of a " strong " tobacco depends on volatile and aromatic substances rather than an increased amount of nicotine, though this may be more readily absorbed as the tobacco is moist to give a cooler smoke and prevent the sore tongue of the heavy smoker. Connoiseurs cannot appreciate the nicotine content of the tobacco they smoke any more than they can appreciate the brand of tobacco or cigarette by smell and taste alone.

The Effects of Smoking

Nicotine is an important substance to the physiologist and the pharmacologist by its use as a blocking agent in the autonomic nervous system, but it has no therapeutic use in medicine. Its importance to us is entirely due to its use as a social drug which is easily and pleasurably absorbed and produces certain effects. The prodigious doses of nicotine used and the severe effects produced in experimental animals are not therefore comparable to its use in man. Darwin in " The Origin of Species " mentions that monkeys smoke with pleasure, but I do not know that these more relevant subjects have been used. The best experimental animal is man himself and volunteers are less difficult to find for tests with tobacco than for some other forms of clinical research. In addition to much experimental evidence thus obtained, both the individual smoker and the community as a whole are available for continued clinical observation.

The amount of nicotine absorbed in smoking has been estimated by several investigators with reasonable agreement. The depth of inhalation into the respiratory tract influences the amount absorbed but not as much as is commonly thought, for much is absorbed from the tongue and mouth. 80–90% of the nicotine entering the mouth is absorbed into the blood and for one cigarette this is estimated as from 2 to 4 mgm. Corresponding effects on the body, both in the smoker's symptoms and the signs they produce can be achieved by intravenous injection of nicotine, 1 mgm. roughly corresponding to the smoking of one cigarette, but investigators differ in their estimate dependent on the specific effect they are studying.

The effect of nicotine differs in degree in individuals whether non-smokers or smokers and this personal variation is also seen if nicotine is injected rather than absorbed by the normal routes. Toxic effects occur and symptoms develop with a smaller dose in the non-smoker and a tolerance is quickly built up in the habitué, but he too will experience the same symptoms if he exceeds his individual limit. It is most important to realise that there is no defined limit of over-smoking and the best guide to this is the smoker's symptoms. At the same time it must not be forgotten that definite effects are caused in the most tolerant smoker in the absence of any subjective sensations.

The symptoms of tobacco intolerance are familiar to all when they first smoke and few have not experienced, or have forgotten them. To a lesser degree they occur in chronic form in continuous overdosage, or in milder form when the customary dose is temporarily exceeded. They can be most conveniently discussed under the various bodily systems and functions, together with the signs produced and the possible influence of tobacco on the corresponding disorders and diseases.

Nervous Effects.

Nicotine is primarily used for its effect on the higher centres of the brain. People smoke because they like to and this must not be forgotten when interest is focussed on its effect on other parts of the body. The pleasurable sensation is not at first experienced by the non-smoker and is an acquired taste. It is difficult to analyse or describe but that it is not dependent on the concomitant reflexes of smoking such as puffing, smelling and tasting tobacco, is shown by its occurrence when nicotine is injected or taken by mouth over a period.

It is clearly a sedative effect due to depression of the higher centres and has the same effect in cutting off distracting and disturbing sensations and of allaying anxiety as alcohol. The increased consumption of tobacco and the increased number of smokers in both world wars is relevant here and is unlikely to have been due entirely to increased social contact. In the smoker nicotine has a stabilising effect. Thus, when there is depression of higher centres as in the boredom and monotony such as are induced by lectures it will often stimulate, and will ward off sleep ; when there is over-stimulation as in physical discomfort, pain or anxiety, it will have a calming effect. To the smoker, tobacco is a help in concentrating on a specific task ; for instance he finds it difficult to work in a library where this help is denied him ; this does not mean that it increases his mental efficiency. Many tests, mental, muscular, co-ordinating, or fatigue-producing, have been done in an attempt to decide the effect of smoking on performance, but the results are usually equivocal and unconvincing. The smoker naturally tends to perform more normally if he is not deprived of tobacco, for he is conditioned to it, and smokers and non-smokers are not comparable groups. For instance, it has been observed that in a university group the non-smokers had more academical distinction than the smokers ; it cannot be assumed that this is because of smoking, for the scholars are themselves a distinct group in a similar way to the rowing eight, probably non-smokers and not necessarily academically distinguished.

Nor are the achievements of smokers and non-smokers relevant. Great men will achieve greatness whether they smoke or not and the failure in life is likely to console himself by adopting social customs to excess. There are no controls, for I know of no evidence of the effect of smoking on identical twins, nor is there a non-smoking Churchill.

Overdosage in the smoker and small doses in the non-smoker naturally produce inefficiency compared with their normal state. For instance, muscular co-ordination is certainly impaired, for tremor is a common symptom and anxiety and restlessness will be produced rather than allayed. Dizziness and headache are common toxic symptoms. The vomiting and vasomotor collapse of intoxication are also central in origin. Lethargy and slow thinking may be caused by chronic excess and the feeling of well being from abstention could support this, though it could be due to absence of toxic effects elsewhere, the irritating effects of withdrawal, or the enthusiasm of the reformed character.

One of the main joys of smoking is the realisation of how pleasant it is, which is not entirely dependent on the surroundings and circumstances, but appears an intrinsic and capricious effect. The habitual smoker, however, does not always experience this effect on his higher centres, and it is unfortunately the exception rather than the rule. The next smoke is more often demanded in order to restore the status quo and to alter the sensations produced by not smoking. The body does appear to resent the withdrawal of the specific effect of tobacco and it seems likely that the cells involved are in the cerebral cortex. The analogy with Cocaine and Morphia as drugs of addiction is clear, though it is ridiculous to press this too far. It is comparatively easy to stop smoking ; the body adjusts itself much more quickly and relapse, when it occurs, is usually deliberate. Mark Twain said it was easy to give up smoking for he had done it thousands of times. Limitation of the drug is more difficult than complete abstention, for the mild withdrawal effect, as well as the social inducement, is always operating. The failure to cut down smoking has recently been seen on a national scale for while a few people were able to make a complete break, there was only a temporary decrease in consumption of those who continued to smoke.

Alimentary Effects.

The effect of tobacco on the alimentary tract is very variable, dependent on the amount taken, the time relationship with meals and the individual tolerance. The toxic symptoms in the novice smoker are largely gastro-intestinal with anorexia, nausea, leading to vomiting and diarrhœa, though in acute intoxication vomiting is due to direct stimulation of the medullary centre. The chronic or excessive smoker tends to show the same trend ; his appetite is diminished and he gains weight if he stops smoking ; he may occasionally experience nausea usually in the morning and not necessarily associated with excessive alcohol ; he experiences constipation if he is deprived of his usual stimulus to peristalsis ; there also appears to be some delay in emptying the stomach through pyloric spasm. Those accustomed to smoke in moderation feel that it aids digestion and though the general feeling of sedation and satisfaction certainly plays a large part, it is a clinical observation which must not be disregarded in favour of experimental evidence on local function, particularly when this is on animals. Tobacco is certainly a large factor in dyspepsia and disordered function, particularly in certain susceptible individuals, though it must be remembered that other irritants, nervousness and anxiety may contribute to the same symptoms. Heartburn, wind, fullness, and even pain may be relieved by ceasing to smoke, and if the sufferer has not already tried the effect himself it is worth advising. In such cases dogmatism may help in encouraging this treatment, which is a drastic one for the patient, but this should not lead to obstinacy and defeat if the experiment fails.

Gastritis appears to be common in the heavy smoker and the rarer tobacco chewer, but there are likely to be other associated irritants. The evidence that smoking causes or even contributes to peptic ulcer is not strong. Statements that " most people with duodenal ulcer have smoked excessively for many years " (Hurst and Stewart), that " it is rare to see a duodenal ulcer in a non-smoker " (Bennett), mean little. There is adequate evidence in controlled series which show that the proportion of smokers and amount smoked is no higher in those with peptic ulcer than in the general population. Recurrence of ulcer after operation is often attributed to smoking—it is natural to blame something—but the figures though suggestive are not convincing, particularly as those who continued to smoke against advice were probably not so careful in other respects. That smoking retards the healing of ulcers has more support, though it is difficult to be certain, for the criteria of healing are not absolute. The patients' symptoms are not good evidence for the smoker may well get dyspepsia despite his healed ulcer, and the abstainer will naturally wish to be rewarded for his effort ; nor is radiological evidence as conclusive as is sometimes maintained. Some recent work on the success of antacid therapy in smokers and non-smokers with peptic ulcer suggests that this is less effective in the former group, but antacid therapy alone is rarely successful in either ; the investigators (Batterman and Ehrenfeld) did show, however, that the patients' symptoms were due to the nicotine content of cigarettes in refractory cases. There has been a more tolerant attitude to smoking in ulcer patients of later years. When I was a student and house officer the circumstantial evidence of a blue haze or cigarette-end near an ulcer patient was almost tantamount to summary discharge and they surreptitiously puffed out of the lavatory windows. A softening of this attitude has corresponded to a general increase of smoking in the wards and a less rigid insistence on the minutiæ of medical treatment, so that the tray of assorted oils and alkalis which used to be the feature of the bed table of the ulcer patient is now too often replaced by a tray of cigarette stubs. Personally, I tell ulcer patients that excessive smoking may be a factor in recurrence, that there is evidence that it delays healing, and that to stop smoking is the best way to avoid excess in their own individual case. It is then up to them. If they decide to try, every encouragement is given them, but autocratic statements or primitive measures are not justified on the evidence. If I had an ulcer I would *decide* to stop smoking but I can say no more than that. Time, a full stomach, and both mental and physical rest are the prime necessities for a healing ulcer. In the lower reaches of the alimentary tract tobacco has a stimulating effect as shown by the diarrhœa of intoxication and the constipating effect of abstention. In those with overactive and irritable bowels tobacco will cause symptoms and it is a well known individual factor in the disorder of Colon Spasm.

Cardiovascular Effects.

More work on the effect of smoking on the cardiovascular system has been done than on other functions of the body. Methods of study of this system are well established and familiar, control studies in the same subjects when not smoking and in non-smokers, with different methods and material for smoking, and with the injection of nicotine have all been done in standardised conditions, so that reasonable conclusions can be drawn. It is established that the effects produced by smoking are due to nicotine and vary directly with the amount absorbed, though considerable individual variation is seen both in those accustomed to tobacco and those with no tolerance. There is, however, no significant difference in the changes between groups of smokers and non-smokers when injected.

There is peripheral constriction shown by diminution of skin temperature, the plethysmograph and by microscopic observation of decrease in the number of nailfold capillaries, decreased flow being largely in the skin. Increased depth of respiration and rate of puffing is a physiological factor which contributes to this, but the main effect is due to the absorption of nicotine.

The pulse rate increases ; an average rise to 36 beats with two consecutive cigarettes or injection of 2 mgm. nicotine was found in one series of experiments, and an average rise of 19 when 6 mgm. nicotine was injected in another. Palpitation is of course a common symptom of intolerance to tobacco.

Both systolic and diastolic pressures are raised from 10 to as much as 20 mm. of mercury. The effect is a rapid one during smoking or immediately after injection of nicotine and there is a return of pulse rate and pressure to basic level within 15 minutes.

Slight changes in the electrocardiograph with smoking and injection of nicotine have been shown in smokers under the age of 40 not suspected of coronary artery disease, but they are by no means constant and I am doubtful if the evidence is sufficient or if we know enough about normal variations. At present it is certainly not strong enough to suggest that smoking causes coronary insufficiency in normal people. Increases in cardiac output have been shown in some instances to occur. It is of interest that alcohol has a slight effect in diminishing the vasoconstricting effect of tobacco.

It is well known that extra systoles may be caused by smoking as they are by many other drugs and reflex causes. They are found, however, very frequently on routine examination and it is possible that smoking may merely bring them to the notice of the patient. They can be very troublesome and when I have on occasion lain awake with extra systoles from excessive smoking it is easy to understand how it may be difficult to convince the lay sufferer that they do not mean heart disease. Correspondingly it would thus be easier for the layman to take the hint and cut down his consumption of tobacco, which is obviously the right action.

The effect of smoking in health is therefore to cause peripheral constriction and to increase slightly the work of the heart at rest. There is no evidence as yet that it affects coronary blood flow.

Let us now consider tobacco in its relation to disease of the cardiovascular system. It is not long since the textbooks listed tobacco with alcohol, gout, lead poisoning, and other miscellaneous causes of heart disease. Much use of this was made by the anti-tobacconists but there is no evidence that this is so in any types of heart disease. That smoking may aggravate is another matter and must be considered. Thrombo-angeiitis obliterans or Buerger's Disease is rare in non-smokers and most of the sufferers have been heavy smokers ; this, and the production of similar lesions in male, though not female, rats has suggested that it might play a large part in the etiology of this disease, particularly as there was little else to suggest. This is not generally accepted, but there is a strong case that tobacco does have a bad effect on those who have contracted the disease and that the conditions improve when the patient stops smoking. The peripheral constriction which occurs in normal people supports this clinical observation, for it would not only aggravate the vessels affected but would diminish the necessary efficiency of the collateral circulation. I think this condition is one where an absolute ban on smoking is justified. With endarteritis obliterans the case against tobacco as an etiological factor is weaker, but abstention may relieve symptoms and improve the circulation and should certainly be advised, if not with such force. It is also reasonable on the evidence to advise the patient with Raynaud's phenomenon that smoking may aggravate the symptoms.

There is no evidence that hypertension is caused or influenced by smoking. Patients may find that their tolerance is diminished, and have often cut down their consumption before they seek advice. A further rise in blood pressure often occurs with smoking, with marked individual variations, but this is common to every other activity and particularly with anxiety. If tobacco helps to allay this then it is reasonable in moderation.

The apparent increase in coronary artery disease in later years corresponds to an increase in smoking habits but the indictment of tobacco as an etiological factor in the cause of coronary atheroma is an assumption only. It is well known that angina may be produced by tobacco, and as this slightly increases the work of the heart in people without this evidence of coronary artery disease, this is hardly surprising. Much stress has been laid on the electrocardiographic changes which occur with smoking but we now know that these may occur in these patients with exercise, emotion or anoxæmia, sometimes without the production of pain. These changes have also been observed without the other evidence of increased work for the heart as shown by raised pulse and pressure, and a direct effect of tobacco on the coronary arteries has therefore been assumed. It is possible but not proven. In practice, it is obviously unwise to encourage angina by smoking and the amount should be rationed in the same way as other productive factors such as exercise. One must not forget the sedative factor of smoking and withdrawal could well increase anxiety, restlessness, and irritation which are no less important factors. Advice must clearly be adapted to each individual patient and many have already taken the matter into their own hands. On the present evidence complete abstention from tobacco is no more indicated in angina than complete physical inactivity, except when a recent or incipient infarction is suspected.

Recent work by Burn, Truelove, and Walker on the increased production of antidiuretic hormone by smoking is relevant to this subject. They have shown that one to three cigarettes or the intravenous injection of 0·33 to 1 mgm. of nicotine causes an inhibition of water diuresis, and that this is due to release of the antidiuretic hormone from the posterior lobe of the pituitary which can be found in the urine after smoking. As this hormone is thought to be identical with vasopressin which is a general constrictor of vessels, it fits in with the known effects of nicotine on the circulation. Burn has shown that nicotine first dilates the coronary vessels of the dog and that later there is a constriction with diminished flow similar to the effect produced by posterior lobe extract. He estimated the amount of posterior lobe extract in smoking volunteers by observing the antidiuretic effect and found that the concentration was in some instances above the threshold which caused coronary constriction in the dog. The subjects, however, who showed the maximum antidiuretic effect were non-smokers and it was the coronary arteries of the dogs and not the volunteers which were constricted. This is important and suggestive work but we are not yet justified in telling our patients that smoking diminishes the lumen or the flow in their coronary arteries.

Respiratory Effects.

It has been strongly maintained that smoking decreases the efficiency of athletes, and abstention is often enforced as a traditional and ritual taboo. It is unwise to neglect social observations because there is no medical proof, though certainly the adverse effect of smoking on " wind " was held too strongly by the athletic laity. Some recent work by Professor Melville Arnott and his research team at Birmingham indicates that there is a sligh diminution of vital capacity, a definite increase in residual air, and a diminution in chest expansion in smokers. These are common in older people but the changes were significant when correlated with age and occurred in young men, and were linked with recent smoking. This is some confirmation of the athletic credo and though it may be a small factor, if it adds the extra ounce to the oar, the extra yard that means a try, and the odd second off the half-mile, it will well repay individual abstention. The rest of us will not be disturbed and cling to the opinions of those who say that smoking has little effect on respiratory efficiency.

Smoker's cough is a well-established entity which in the individual is linked with the degree of smoking and there is no doubt that tobacco smoke is irritating to the respiratory tract, as it is to the eyes. It emphasises and aggravates existant diseases, whether acute or chronic, but smoking does not cause repiratory disease with the possible exception of cancer of the lung. Let us now consider this problem.

Cancer of the Lung.

There has been in the last twenty-five years a remarkable increase both in the recorded death rate and in autopsy records of cancer of the lung. Increased awareness, improved means of diagnosis, and possibly the greater concentration of cases in hospitals is partly responsible, but there is sound evidence that this is more than an apparent increase. Increased recognition can hardly explain the Registrar-General's figures for England and Wales which show a fifteen-fold increase in the number of deaths from 1922 to 1947. Other countries throughout the world have also experienced an increase of cancer of the lung as compared with cancer in other sites. Naturally, many explanations have been profferred but the two most important are pollution of the atmosphere with tar, gas, coal, and car exhausts ; and smoking. The evidence of air pollution as a cause is not convincing, but the possibility that smoking is a factor has increasing support. A number of small series have shown the rarity of bronchial carcinoma in non-smokers, particularly in males, and the high incidence of heavy or chain-smokers in the sufferers, but the strongest evidence is from statistical analyses of a large group from many hospitals and centres. In 1950 Wynder and Graham in America and Doll and Bradford Hill in this country investigated 605 and 709 proved cases respectively, and the results are remarkably in agreement, both in figures and conclusions.

The statistical evidence of Doll and Bradford Hill is particularly convincing. There seems to be no escape in fallacies of sampling, interviewing, or control series, from their conclusion that " smoking is a factor, and an important factor, in the production of carcinoma of the lung." Here are some of their figures :—

649 men with carcinoma of the lung		
	Non-smokers	0·3%
	Heavy smokers	26·0%
649 controls of same age and social group		
	Non-smokers	4·2%
	Heavy smokers	13·5%
60 women with carcinoma of lung		
	Non-smokers	31·7%
	Heavy smokers	14·6%
60 women controls of same age and social group		
	Non-smokers	53·3%
	Heavy smokers	0·0%

Heavy smokers in these figures means 25 cigarettes or more a day before the cancer developed. We know that smoking habits change and are difficult to elicit but the same trend was shown when the maximum amount ever consumed, or an estimate of the total amount over the years was used. It appears from these, and the American figures, that the risk of cancer of the lungs varies directly with the amount smoked over the years. There is no evidence that this is immediate, but rather that it requires many years for the effect to occur. Nor is there any comforting evidence that giving up smoking as the cancer age approaches will prevent its occurrence later. Doll and Bradford Hill calculate from their evidence that the risk of developing cancer of the lung above the age of 45 is approximately 50 times as great among those who smoke 25 or more cigarettes a day than with non-smokers. It would seem to me that the most hardened sceptic of statistics needs also to be a poor betting man if he disregards those odds.

You will see also from these figures that despite the smaller proportion of smokers and heavy smokers in women the same association with cancer of the lung is seen. It is possible that the high sex incidence of lung cancer in men is because women have not been smoking for long enough, but with the ending of social taboos and widening of their activities they are quickly remedying this, and the male predominance in lung cancer may well decrease in the next ten years. Certainly if one takes non-smokers of both sexes the predominance of men developing cancer of the lung disappears.

It seems that pipe smoking carries a smaller risk of lung cancer than the cigarette. On the whole the pipe smoker tends to be more moderate, but with an equivalent consumption of tobacco he still appears to be less vulnerable. It is not clear why there is this difference. That the pipe or the cigar butt may act as some protection or filter between smoke and smoker, that there is something injurious in the cigarette paper, or that there is some difference in the cultivation or preparation of the different forms of tobacco do not seem likely explanations. More cigarette smokers are conscious " inhalers " and certainly they appear to do this more than the puffing pipe smoker, and this would be a reasonable explanation. This point, however, was included in the London investigation, but no distinct association with inhalation was found.

Apart from these statistical surveys there is also circumstantial evidence indicating the cigarette as a factor in lung cancer. The rise in incidence corresponds to the increased popularity of the cigarette for at the beginning of the century, the poor man smoked his pipe, the rich man his cigar, and only the most advanced women smoked at all. The cigarette is now common to all classes and both sexes. The incidence in different countries corresponds to their total consumption of cigarettes ; Great Britain has the highest consumption in Europe and appears to have the highest incidence of cancer. The incidence of cancer in Iceland is remarkably low compared with other countries and until the war the cigarette consumption was correspondingly light. In recent years, presumably due to contact with the British and Americans, there has been a very marked rise in cigarette smoking, and it will be interesting to see if lung cancer follows suit, though it will take several years for this trend to show.

If smoking, and particularly cigarette smoking, predisposes to bronchogenic cancer—for the evidence with the rarer adenocarcinoma is less convincing—either chronic irritation or the presence of a carcinogen must be a causal factor. Chronic irritation from a hot pipe is certainly a factor in epithelioma of the lip. In India cancer of the mouth is associated with the addition of tobacco to the wad of the betel chewer and cancer of the hard palate develops among a group who indulge in cigar smoking with the lighted end in the mouth. It would seem that smoking exposes the bronchial tree to some substance which is at least a factor in the development of cancer, though it is odd that the site should so often be confined to a few centimeters of the larger bronchi. There is no evidence as yet that nicotine or any other constituent of tobacco is carcinogenic but no doubt recent interest in this problem will stimulate investigation. It has been suggested that arsenic may be the factor. Insecticides containing arsenic have been used for spraying the tobacco crop for the last century, arsenic has been found in tobacco smoke, and the reported occurrence of lung cancer in arsenical sheep-dip workers emphasises this point. Apart from its effect in the lip, mouth and lungs, there is no evidence that smoking predisposes to cancer elsewhere in the body.

Miscellaneous Effects.

I have no time to refute many of the exaggerated and wholly unjustified indictments of tobacco as a cause of mental, moral and physical deterioration. These were eloquently dealt with in a clinical lecture by Dr. Boland which was published in the *Gazette* of June 18th, 1938. A few miscellaneous points remain to be made. Tobacco amblyopia has been overstressed, is uncommon, and usually associated with other poisons or degenerative diseases. Smoking does not affect fecundity, pregnancy, or the fœtus, and the amount of nicotine in the milk of the most hardened smoker is not enough to affect her child. Smoking is unlikely to have any direct effect on longevity, for though some figures have shown a decreased expectancy of life in heavy smokers, these are more likely to be immoderate or careless in other respects. Let me end by saying that even if the lives of smokers are a trifle shorter, perhaps they may also be that more the merrier.

Guy's Diary

December		**ACADEMIC**
		Exhibition. Surgical Department. "Incisions and Suture Materials."
17th	12.00.	Mr. H. H. Kenshole. Dental Clinical Lecture. "Doctors, Dentists and Penicillin." Dental Theatre.
	1.00.	Mr. Cook. Clinical Lecture. "Genital Tuberculosis in Women."
18th	1.00.	Dr. Hills. Clinical Lecture. "The Radiology of the Œsophagus."
20th	1.00.	Sir Heneage Ogilvie. Clinical Lecture. "Failures of Gastric Surgery."
28th	1.00.	Dr. MacLean. Clinical Lecture.
31st	*1.00.*	Dr. Campbell. Clinical Lecture.

December	**SPORT**
29th	Rugby 1st XV *v.* Old Millhillians. (Headstone Lane.)

Guy's Hospital Chapel

CHRISTMAS SERVICES, 1951

Thursday,	December	20th	8.30 p.m.	Festival of Lessons and Carols.
Friday,	,,	21st	9.30 p.m.	Preparation for Christmas Com*munion.*
Sunday,	,,	23rd	7.0 a.m.	Holy Communion.
,,	,,	,,	10.45 a.m.	Service and Address.
Monday,	,,	24th	11.40 p.m.	**Blessing of the Crib, Midnight Mass and Carols.**
Christmas Day			7.0 a.m.	Holy Communion and Carols.
Wednesday, (St. Stephen, M.)	December	26th	7.0 a.m.	Holy Communion.
Thursday, (St. John, Evangelist.)	,,	27th	7.0 a.m.	Holy Communion.

Holy Communion on Christmas Day also at :

Southwark Cathedral :	8.0, 9.0 and 11.0 a.m.
St. Hugh's, Crosby Row :	8.0 and 9.0 a.m.

W. DENYS GIDDEY,
Chaplain.

Memories of Guy's

By A. R. THOMPSON, Ch.M., F.R.C.S.

Consulting Urologist, Guy's Hospital

V. OTHER HOSPITALS AND PERSONALITIES

(*concluded*)

WE must now go to St. Thomas's Hospital, where even the recent secretary of the medical school was a considerable character, alas, now dead. Colonel R. J. C. Thompson played for St. Thomas's and the United Hospitals (really only St. Thomas's and Guy's) and also for Middlesex County. He might easily have attained greater honours, but he was not ambitious. Across the intervening years his voice reverberates quite strongly and I hear it easily, but I cannot see for some time after I hear it, for the thought of those days brings the inevitable tear.

Now let me run over some of the other men whom I have known at this hospital. The medical school and the students' club were situated at the Lambeth Palace end of the hospital and there, in the dissecting room, I frequently met F. G. Parsons, the professor of anatomy. He was indefatigable in his capacity for work, which was especially connected with comparative myology and anthropology, and, in addition, he examined for various universities and for the College examinations, as well as for the primary fellowship. He told me that, in the primary viva, he paid no attention at all to the answers of the candidate in the first two minutes—an eminently reasonable attitude. In time he became president of both the Anatomical and the Anthropological Societies. The museum of the hospital is quite close to the dissecting rooms and in it there are some very good specimens of prostatic calculi, remarkable for their brilliant jewel-like colours and for their beautiful iridescence.

I first met Parsons in 1906–7. At that time there had been much trouble in the medical schools in obtaining adequate supplies of subjects for dissection. This was primarily the fault of Guy's, from which the school janitor had gone to one infirmary to manage a matter which called for supreme tact. I do not doubt that money was often paid to people who helped in this connection, but unless this were done with the greatest circumspection, bribery and other corruption could easily be suspected. The janitor in question did his job so very stupidly that a great cry was heard in the councils of certain localities and thereafter the supply of subjects practically ceased. Kent was famous for the number of its tramps and though, among this class of the community, deaths were as frequent as ever, the bodies at this time were all claimed by official and officious people, many of them well-intentioned women. When I became senior demonstrator of anatomy I found it necessary to seek for subjects at various infirmaries and workhouses around London. One of these places was at Willesden and was said to be situated in Acton Lane. Surely no one can know the extreme length of this lane better than I do, for unwittingly I took a train to that end of it which was furthest away from the hospital and, as night was falling, I was still struggling along roads that were not made up, only to find when I eventually arrived at this infirmary that the steward was unable to help me ! It was through such labours as these, however, that I got to know some of the professors of anatomy in London, Parsons being amongst them. Apart from this good fortune, however, my labours in this way were almost entirely unrewarded.

The surgeons on the staff at St. Thomas's of whom I knew were Betham Robinson and Cuthbert Wallace. Wallace I never met, but at this time his reputation was very great indeed. As is well-known he later became president of the College of Surgeons.

H. B. Robinson was then senior to Wallace at St. Thomas's and had been a medallist in surgery at the London examination. He was a beautiful and expert carpenter, but did not have such good results as his skill suggested. At this time the surgeons at St. Thomas's were practising what they called aseptic surgery, or what was so-called euphemistically. This consisted in washing the hands with ether soap and water and then rinsing them in plain, sterilised water, which was also used as lotion throughout the operation. This was not really enough and many cases of suppuration occurred subsequently in Robinson's cases. As an expert carpenter he made the inevitable mistake of being addicted to handling the parts too often and too long. I remember one case of cleft palate in a nice little boy who used to follow me round the ward at Shadwell when I was seeing the patients. Robinson operated for over an hour and the patient bled a good deal. Although the result was a thing of beauty, it was not a joy for ever, as the patient died after the operation, living only for a few hours. At one time Robinson managed the throat department at St. Thomas's and did most useful work there. But I think that his adoption of sterilised water as a lotion to be used at operations was a sad mistake.

In after years I met Nitch and also Robinson's son. Nitch was a very able man and also a first-class operator. He had a very sound judgment and wrote, amongst many other papers, one dealing with early tuberculosis of the kidney. This was most clear and helpful and cleared up many debatable points. He also wrote a very good paper on the results of Coffey's operation for transplantation of the ureters. Generally his views were much in demand by other urologists but, despite the temptations, he refused to take up this specialty as a whole-time job. Instead, he kept up his general connection and showed thereby his independent mind. I met him at masonic and other dinners, where he was always welcome.

I saw the younger Robinson in 1939 when he was accompanied by several distinguished urologists who had come to London in order to attend an annual meeting of the Urological Section of the Royal Society of Medicine. Like myself, they were very impressed with the ability which he showed in removing a kidney, a simple operation no doubt, but one that demands the quintessence of operative skill. There is a neatness, an expedition and a definite plan which shows the first-class man ; Robinson displayed all these qualities. Moreover, he had no false ideas about the value of sterilised water as a lotion for operations. But I was even more impressed with the way in which he carried out a transurethral prostatectomy, using an operating cystoscope of his own design. The mincemeat came out neatly and in a distinguishable manner. The whole manœuvre was conducted in a most masterly way, especially as regards the technique, and I only wish that the father could have heard the nice things that were said about his son on this occasion.

Of the physicians on the staff at St. Thomas's, Sharkey was the best and most distinguished in my time as a student. He was, I believe, quite popular amongst those who followed him round the wards, but he was greatly feared by candidates at the College examinations. Beddard was one of his victims in such a circumstance. Co-examiner with Sharkey was Norman Moore of St. Bartholomew's, admittedly no outstanding physician, but a great reader of books, a connoisseur of prints and pictures, and a courtly and kindly man. Sharkey asked Beddard some question, with the reply to which he was not at all satisfied, a situation which he conveyed in no measured terms. Norman Moore thereupon intervened to say that, for his part, he was in entire agreement with the candidate. The two then joined issue and argued about the matter until the bell went, Beddard then departing without having been asked a further single question. What marks he obtained I do not know, but at all events he was successful !

One of the worst physicians that I ever met was, I must confess, on the staff at St. Thomas's. He once asked me to perform an operation for an empyema which was seen by both of us in a hospital at Tooting where we were consultants together. He rang me up on the morning in question and said that he supposed that I should not enter the empyema through the peritoneum. I told him that however popular such a route might be at St. Thomas's it was not the one that I intended to adopt in this case. He then said that he was wondering if the lung would expand after the pus had been evacuated. I told him that I had never seen the lung fail in this respect after such an operation where the rib had been resected. I suggested that hydrogen peroxide might be a useful lotion to adopt for thorough cleansing of the cavity. He demurred to this and said he thought that the bubbles produced by the peroxide might prevent expansion of the lung. To me he appeared as a far from competent physician and certainly lacking in any knowledge of elementary physics. The case was one of ordinary empyema and presented no difficulties, either at the operation or afterwards. A surgeon must never be put off in this way by a physician who has false ideas of pathology.

As for Makins, I did not meet him until long after he had retired from the staff of St. Thomas's. Then I liked him very much. He was cynical at times but, as a rule, most tactful. He had a distinguished appearance, as indeed befitted a G.C.M.G. and a president of the Royal College. One American surgeon, in a published critique of his various British counterparts, wrote that he would rather have Makins operate upon his wife, should the need arise, than any other surgeon in London. But he had very little idea of how Makins first learned his surgery. This was the manner of his ascent to fame. There were two surgeons at St. Thomas's, both on the senior staff. Along with their Irish names, they must have inherited other features of their Hibernian ancestry for, I regret to say, they were both accustomed to drink more than a little at lunch time. They then found themselves incapable of completing the operation upon which they had somewhat optimistically embarked with the hope engendered by alcohol in the first instance. Makins was elected assistant surgeon in the charge of these two men. He proved most tactful with his opportune interference, intervening only when they had strayed some distance from the road to success, and contriving, before the end of the operation, to hand back the knife in such a way that, not only the principal but also everyone else as well, could be under the impression that the great man himself had brought the affair to a completely successful conclusion. It was Makins, too, who said to a certain man who advocated lethal measures when a patient had an inoperable cancer and was suffering great pain and misery, " Well, you never know the day on which he may do the greatest work of his life."

I have two stories of members of the staff of St. Thomas's ; the first one is this. It is an example of medical cordiality, which may be characteristic, but is certainly insincere. One of the best known physicians at this hospital was in the habit of shaking hands with every student he might meet. He also made enquiries after his health. But it was generally agreed that, beneath the cordiality, there was very little soul and no real recognition of the person whose hand he grasped so effusively. A student determined to perform an acid test. His colleagues, who were waiting for their respective chiefs, observed their comrade emerge from one of the pillars at the entrance of the hospital. The physician in question, on his arrival, at once shook hands very warmly with the student. The latter then retired behind the pillar and emerged again to have his hand shaken once more. A similar action on the part of the student and the physician took place altogether on eighteen separate occasions ! The second story concerns a well-known author of a textbook on surgery. This surgeon had occasion to speak severely to a nurse in theatre. The next day the matron of the hospital sent for the surgeon and told him that she could not tolerate one of her nurses being rebuked in public. The surgeon murmured that, at any rate, the nurse had done what she was told. " In what way ? " said the matron. " I told her to go to the devil " the surgeon replied, " and evidently she has done so ! "

I always like walking along York Road, across Waterloo Bridge and so to Bow Street, Covent Garden and Soho, not forgetting here to speculate, as I always do, which was the house that the Manettes occupied when they lived in the neighbourhood and what exactly was the route that Mr. Lorry took, on his way to Clerkenwell, when the great storm broke with its pattering that was so like the footsteps heard at that time in Paris. Let us pass up Tottenham Court Road and, turning to the right, come upon the magnificent buildings of University College Hospital—a noble pile and most conveniently planned. At this hospital I heard Godley teach and Victor Horsley utter a few words. Godley was a good teacher, a sturdy-looking man with a good presence, a moustache and whiskers. He was a quaker, a nephew of Lord Lister, and the author of a life of his uncle. This book may be recommended to all students. Godley used to teach clinical surgery on Friday afternoons. The plan he adopted was to go round the wards discoursing on the cases and, after about an hour spent in this way, he would adjourn to the clinical lecture theatre where he gave most excellent demonstrations on surgical anatomy. I have in mind one excellent lecture that he gave in this way on femoral hernia. He had brought out an excellent atlas of anatomy with large coloured drawings. Such books were not much used at Guy's Hospital where the splendid wax models of dissections done by John Hilton testify, not only to the excellence of the dissector, but also to the genius of Towne in exactly copying them. One afternoon I accompanied Godley round his wards and he showed a case of piles in a man who had been under the care of Guy's men somewhere in Essex. They had operated at least twice upon the patient, but after each operation the piles had recurred. So the case was sent up to be under the care of Godley. He examined the rectum and found there a large cancer. He pointed out how necessary it was for a doctor to examine the rectum in all cases of piles. Out came at once the notebooks of all the students who were looking forward to a gold medal in surgery at the next London examination that so frequently and deservedly comes the way of students at this hospital. They jotted the point down, but the Guy's man who was going round with him was the only one of the bystanders to examine the rectum for himself.

I recall seeing Godley operate, when he removed a large and inconvenient sub-deltoid bursa. He operated well and neatly and as one who knew about things pathological as well as anatomical. Lane, by this time, had introduced his method of refraining from putting his hands into the wound at operations, but as Godley still adhered to the old plan his operation came as rather a shock to me. Godley contributed the article dealing with surgical anatomy in the tenth edition of Quain's " Anatomy." It is quite one of the best of its kind that I know. He also wrote excellent articles in the magazine of the parish in which he lived near Goring-on-Thames. These were afterwards collected together and put in book form, with a foreword by Sir George Newman. The book was named " A Village on the Thames," and not the least charming part of it was the above-mentioned foreword. One can almost see the scholar gipsy " in cloak of grey, and hat of antique shape " come round every corner of its pages and the foreword clearly shows that even public officials may have souls as well as austere bearings. Before he died Godley was President of the College. He had made a great name for himself as a pioneer in thoracic surgery.

I saw Wilfred Trotter about this time. Up to this period he had been second to a brilliant young man at University College Hospital who helped Horsley with his brain work. This young surgeon had obtained a great reputation as a student, as a house officer and as surgeon at his own hospital and also at the Victoria Hospital for Children in Chelsea where I was his junior colleague. But he died tragically at too early an age to attain greatness. He designed an operation for the cure of hypospadias, which was a little too complicated to become popular, and he published a most successful case. During his period of house appointments he had contracted some sore places on the glans penis. His teachers, whom he consulted, affirmed that these sores were not syphilitic in origin as they were multiple ; in my opinion a most reprehensible teaching. They therefore said that mercury was not indicated ; a most reprehensible form of treatment. At a later period he became most unpunctual in his attendance at the hospital, coming into the building as much as two hours late. He had, in fact, developed general paralysis and died very shortly after this disease had first manifested itself. If a patient knows that he has had connection with a woman any sore place, however multiple, is sure to be syphilis, and unless the surgeon can absolutely rely on the word of the patient, he had better administer neosalvarsan or one of its derivatives, mercury, or whatever treatment is the best. Fancy such a trivial thing as the multiplicity of sores and the consequent neglect of the case being syphilitic, leading to the death of one of the most brilliant surgeons whom I have ever met.

Trotter developed later and became very great indeed. He knew every branch of surgery and medicine equally well. He had also studied other scientific work and was always, whenever I met him, thinking deeply about some obscure problem. He was a man of incomparable general knowledge and, as a technician, was quite unrivalled at his best. He was constantly clearing up the mess of some special surgeon or other, whose vanity had led him " to bite off more than he could chew." I saw him once at Kew Gardens, in deep cogitation about some abstruse point or train of thought, in face and features a little like Lord Nelson—at least so it seemed to me, and like him apt to go the shortest way to what he aimed at. Short ways demand previous thought, if they are to be travelled successfully.

Here are two stories of Trotter. One very hot summer afternoon he was operating at University College Hospital. He noticed that the patient was moving and that the anæsthetist was slumbering and snoring audibly. " Surely," said Trotter to the anæsthetist, " if the patient can keep awake, you can." On another occasion he was called into consultation by a neurologist, who happened to be a colleague. Both were agreed about the presence of a tumour of the brain, but differed as to its site. The neurologist said he would give up neurology if he were wrong. After surgical operation, Trotter was found to be right. The neurologist, with a sickly smile, came up to Trotter and said he supposed that he must give up neurology. " Oh no," said Trotter, " I should advise you to take it up ! "

Now, my readers, let us follow " sounds that travel further west " and go to the old Middlesex Hospital where my friend, Alner Hall, has been the architect of a really fine building. I tread its passages with confidence, if not with arrogance, since Guy's has sent such men as Henry Morris, Sampson Handley and Izod Bennett to swell the ranks of its hospital staff. If my manner should be over-assured, I know that I shall have the protection of two of the members of its staff, namely Gordon Taylor and E. V. Riches, whom I am fortunate enough to know very well. In fact I examined with Gordon Taylor for the primary fellowship examination.

Alfred Pearce Gould was a great teacher at the Middlesex in my student days. His son Eric died not long ago in the height of his powers. Morris was also surgeon at the Middlesex at the beginning of the century. I remember one interesting case in which the diagnosis was made on very slender grounds which were, for all that, convincing. A man had a sore place on the left side of the tongue and it looked like cancer. But it was not deep and the great characteristic of the sore was the quite extraordinary pain to which it gave rise. The case was under Gould's care. Sir Henry Morris was in the ward at the same time and I can still see Pearce Gould walking across the floor of the ward and asking Morris to see the case with him. Both agreed, on account of the excessive pain, that the ulcer was tuberculous. The diagnosis turned out to be correct. This is the only example of this condition that I have ever seen and to diagnose it on one point only shows the value of experience—one of the advantages of increasing age, which I am pleased to be able to record.

I think that it was A. E. Barker who used to walk down Harley Street on a Sunday morning with a large bible in his hands. Pearce Gould differed from him in two particulars. He went *up* Harley Street and the bible that he carried always had an elastic band round it. I am sure that it was a bible in the case of Pearce Gould, for he used to attend the old chapel in Park Square and, on occasions, may have preached there. The elastic band is, I am sure, a distinguishing mark of some variety of religiosity and its presence is a useful method of classification. There is a story of Pearce Gould and Stonham who, incidentally, was a great authority on British birds and wrote a book on the subject which was beautifully illustrated, I think by himself. Stonham on one occasion sent a case to Gould for an opinion. The latter telephoned one night to say that he had amputated the breast and, with the help of God, the patient was going on nicely. Stonham at once replied that he was glad that the patient was progressing satisfactorily, but was sorry that Pearce Gould had employed unqualified assistance ! The chapel at which Pearce Gould worshipped is now a clinic for the treatment of rheumatism.

These are the hospitals, and these are the men at which and from whom I have received instruction. That I have made little use of their teaching is not their fault, but still I hear across the years their voices, some loud, some gentle, but all telling me to " play the man."

(*Concluded*)

Reviews

Samuel Crompton. By HECTOR CHARLES CAMERON. London, The Batchworth Press. *Price* 15*s*.

This is the story of the spinning mule and its inventor. The art of the physician is evident in the sympathy with which the childhood of Crompton is treated and the skill with which his mother's influence is traced, whereas in countless biographies from the pens of laymen these most important formative influences on the character of the subject are conspicuous by their absence. The artist in our physician appears in the deft sketches of the country town, the bleak moorland and the hall in the wood that were Crompton's background, and the literary adept in the easy, readable style that is characteristic of the author. The spinning mule itself is of no direct importance to a medical man ; but a tale well told of the industrial revolution, in which it came to birth, is not only of much interest in itself but is evidence of the right sense of historical value, for nothing affects our lives today more than the industrial revolution. The book is light and the illustrations are pleasing. It has the merit which Gosse ascribed to *Blair's Grave* by comparison with *Young's Night Thoughts* : the author knows how long to go on. H.St.H.V.

Atlas of Histologic Diagnosis in Surgical Pathology. By KARL T. NEUBERGER. Bailliere, Tindall & Cox. *Price* 81*s*.

This book is yet another attempt, in the words of the author, " to furnish the aspiring histopathologist with practical information," and is intended to help those who encounter serious difficulties in histological diagnosis of surgical specimens. It fails completely in both these respects.

A random selection of 50 of the photomicrographs was shown to three such aspirants in morbid histology, all of whom had some years experience, and neither an accurate diagnosis of the tissue or of the lesion could be made. It confirmed my own experience.

The quality of the 100 odd photomicrographs is very uneven and most fall below the average standard of photomicrographic work in this country. Even if the illustrations were adequate it is doubtful whether a knowledge of morbid histology can be acquired by any means which does not include a long and personal experience at the microscope. The use of such Atlases is more common in the U.S.A. than in this country where knowledge gained by personal experience is still the aim of medical teachers, who are reluctant to exchange knowledge for superficial information gained by the technique of visual representation which may lead to disuse atrophy of reasoned thought.

Even in this age of the " strip cartoon," it is difficult to know what useful purpose is achieved by such books. N.

A Textbook of Medical Conditions for Physiotherapists. By JOAN E. CASH. Faber & Faber. *Price* 20*s*.

This excellent book provides a useful work of reference not only for the student in training, but also for the qualified physiotherapist. The medical material is set out in a simple and adequate manner.

The first four chapters are occupied with general pathological changes, and constitute a helpful introduction to rheumatic affections, diseases of the respiratory system, disorders of the nervous system, diseases of the cardiovascular system, disorders of abdominal viscera and peritoneum, and some common diseases of the skin and its appendages.

The book is well illustrated by excellent diagrams, photographs and X-ray plates. The author has wisely refrained from giving a detailed description of the physical treatments, but has confined herself to an intelligent and rational explanation of the principles and outline of treatment. S.E.

Humanism, History and Natural Science in Medicine. By F. M. R. WALSHE. Livingstone. *Price* 1*s*. 6*d*.

A superb lecture which will teach no-one any textbook medicine, but will give him much food for thought and very likely improve his outlook as a doctor. G.

Handbook of Gynæcology. By TREVOR BAYNES. Sylviro Publications. *Price* 15*s*.

The purpose and limitations of this little book are clearly laid down by the author in the preface. The subject matter is interesting, well set out, and it is surprising how much information has been compressed into its 156 pages. It has another merit of being very readable.

A handbook as an aid to learning the basic facts of a subject is usually a failure and this book would be no exception if the author had not clearly intended it to be read by those who have already obtained experience in gynæcology. With this proviso, to read it can do nothing but good. The price of 15*s*., however, makes it rather a luxury. G.T.H.

Exercises Before Childbirth. By KATHLEEN VAUGHAN. Faber & Faber. *Price* 6*s*.

This little book, written by a doctor with vast experience in the obstetric field, contains much fascinating and useful information that should prove invaluable to the physiotherapist, midwife and mother-to-be.

The exercises, illustrated by well-drawn diagrams, are founded on sound physiological principles. Other books have been written on this subject, perhaps in more detail, but one and all share and express the same views.

This useful contribution should go a long way to minimising the fears and difficulties relating to childbirth, and reduce the need for perineal repair. S.E.

Aids to Hygiene for Nurses. By E. H. FUNNELL. Bailliere, Tindall & Cox. *Price* 5*s*. 0*d*.

A very useful little book which sets forth adequately the principles of what is so frequently a very difficult subject.

Florence Nightingale. By LUCY SEYMER. Faber & Faber. *Price* 8*s*. 6*d*.

A most interesting and readable book. T.S.

Ophthalmic Nursing. By P. GARLAND. Faber & Faber. *Price* 12*s*. 6*d*.

This is a most useful book containing a wealth of information well set out. As a reference book in an eye ward it has proved itself invaluable. As a text for pleasant reading it is by no means laborious and as a standard work for anyone taking up ophthalmic nursing it can be well recommended. N.R.

Advice to the Expectant Mother on the Care of Her Health and that of her Child. By F. J. BROWNE. Livingstone. *Price* 1*s*. 0*d*.

The 9th edition of this compact handbook by a recognised authority on the subject forms a very useful and convenient supplement to be read by those mothers already attending an ante-natal clinic.

Basic Principles of Clinical Electrocardiography. By H. H. HACHT. Blackwell. *Price* 20*s*.

In some eighty pages Professor Hacht has outlined the basic principles of electrocardiography and has included in his description the newer unipolar limb and chest leads.

Although the larger part of this book is concerned with the genesis of the normal electrocardiogram, the commoner changes found in disease are given.

The book is rather too specialised for the undergraduate student, but affords an excellent introduction for anybody interested in this difficult subject.

J.T.

SALE OF WORK

The Sale of Work arranged by the nursing staff in aid of the Educational Appeal Fund of the Royal College of Nursing was held in the Nurses' Home on November 30th and December 1st. Mrs. Askew very kindly opened the sale. Stalls were laden with a variety of attractive and useful articles. The sideshows were enticing and were well patronised. Both buyers and sellers enjoyed the function. The total amount so far handed in is £850 17*s*. 3*d*.

Our thanks are due to all our friends who helped to make the sale such a success.

Correspondence

Guy's Rugger

SIR,—The excellent letter of Dr. Popplewell (once a Guy's Rugger Captain) in your last issue should be read by all Guy's men. The fortunes of the 1st XV used to make headlines in the Press, and were watched by a big following, by no means restricted to the Hospital. Our Rugger players, and other sportsmen, have mostly made excellent practitioners, whether in general practice, dentistry or specialism, and have made excellent apostles.

There seems to be a growing belief among students that playing games takes up valuable study time. The old adage, " All work and no play . . . " has been forgotten.

The 1st XV are improving from week to week. It may not be generally known that Dr. Walter Lewis and Mr. Fouraker have voluntarily given up their Wednesday afternoons to coach the teams, but they report a disappointing attendance. Wednesday has always been considered a half-day at Guy's, since it is visiting day. Is it too much to hope that those that have classes or clinics on this day make a special point of releasing students so that they can benefit from this generous coaching ?

Yours, etc.,

NILS L. ECKHOFF,
Hon. Treasurer, Guy's Hospital Clubs' Union,
Vice President, Rugby Football Flub.

Keat's House,
Guy's Hospital.

SIR,—I should like to endorse the remarks of the two previous writers on this subject.

Those, who have watched the fortunes or rather misfortunes of the Rugby Club over the last few seasons, will have seen a steady decline. In an evening paper the other day I saw this record

	P.	W.	L.	D.	F.	A.
Guy's Hospital	16	1	10	5	43	123

I trust that this is the rock bottom. If not, the first team will very soon lose some of its best fixtures and in these days they are almost impossible to regain.

It has been shown elsewhere that a successful Rugby team in no way harms a medical school and can give it very good publicity. Too often recently have I been asked, " What has happened to Guy's ? "

Yours, etc.,

P. C. ALEXANDER.

Granville House,
Byfleet.

A Guy's Dinner

SIR,—A Dinner, to take place in Maidstone on January 16th, 1952, is being organised for Guy's men, medical and dental, living in the mid-Kent area.

It is possible that there are some men who would like to come who have not received invitations, due to lack of knowledge of their whereabouts. If any such exist, I should be most grateful if they would get into touch with me as soon as possible.

Yours, etc.,

R. C. PONDER.

Riverside,
Aylesford, Kent.

Musical Appreciation

SIR,—A recent announcement in the *Gazette* of the programme to be performed in the Physiology Theatre prompts me to enlarge upon the subject of musical appreciation at Guy's.

During the last six years, others besides myself have noticed a tendency for recitals and concerts to consist more and more rigidly of works by 18th century composers. Great though these compositions may be, it is debatable whether the musical appetite should be blunted by a surfeit of such material. It must be assumed that one of the primary objects of a gramophone or orchestral society is to entertain an established audience and encourage further membership. The fact that the works to be performed do or do not conform to the general musical background of the organisers or players must surely be a secondary consideration. If any society is to flourish, it must be prepared to embrace a wide range of composers both to satisfy and to encourage all who appreciate this form of art.

Some years ago, a series of lunch-time gramophone concerts was organised with each programme chosen by a different member. In this way, an admirable balance was achieved, to the satisfaction of large audiences. This experiment might well be repeated.

It is difficult to see why such a change has taken place during the past few years. Works by 18th century composers may be considered " safe " for the patient audience. Or is this choice due to a rather unpleasant form of musical snobbishness ? Basil Maine has rightly said : " There are many who look upon a concert either as a kind of penance, or as a cause for self-righteousness, or as a gateway to a strange, remote culture." May we plead for a more catholic choice in our concerts and recitals ? There is much delightful music which is not the product of the 18th century and yet is free from the blight of atonality and the stamp of dissonant counterpoint.

Yours, etc.,
" A ".

Guy's Hospital,
London, S.E.1.

Obituary

MISS UPHAM

A PERSONAL APPRECIATION

OLD Guy's men who remember how keenly their interests in the Conservation Room were watched by the late Sister Dental (Miss Upham), may like to know I saw her in Shoreham Hospital a few days before her death.

Although in her 89th year and suffering from a fractured femur, her general constitution was sound, her kindly spirit shone as clear as ever, and her lingering memories of bygone days immediately lit up when I gave her news of several Guy's men.

So passed a devoted servant of the Dental School. W.G.O.

THE MUSIC CLUB—A CORRECTION AND AN APOLOGY

On 5th December, 1951, a most successful concert was presented by the Music Club choir and orchestra in the Hospital. Unfortunately, in the last issue of the *Gazette*, an announcement of this event was published under the title of " Gramophone Recital." We wish now to draw attention to this correction and, at the same time, to offer our apologies to the organisers and others for any confusion that this might have caused.

Sport

RUGBY

Guy's *v.* London Irish

At the Rectory Field, Blackheath

Result—Drawn 0—0
24th November, 1951

A blustering wind blowing diagonally across the Rectory Field made conditions unsuitable for good Rugby. This game was indeed very scrappy and although it may be said that neither side deserved to score, Guy's were unlucky not to pull it off in the closing stages.

Guy's kicked off into the wind and the Irish applied first pressure. They heeled the ball from the first few scrums but the passing and handling of their outsides were erratic and Guy's gained ground on the occasions when passing broke down. Play oscillated between the 25's on the Hospital right touchline for most of the first half and on one such nut in the Irish half W. G. Davies found the wind too strong in attempting a penalty goal.

In the second half Guy's played with more cohesion than the Irish and kept play in the Irish half of the field. When the Guy's three-quarters had the ball their handling was better, but the centres were inclined to hang on to the ball a fraction too long and movements were soon stopped. On the left wing Middle marked the international Griffin very well, and the latter was unable to get away. Guy's were unlucky not to score when Wilson kicked the ball over their line following a dropped pass—the Irish full-back just winning the race for the touch down.

Guy's *v.* Coventry

At H.O.P. Result—Lost 3—6
1st December, 1951

Coventry fielded a very strong side which included four internationals and several county players at Honor Oak Park. Guy's rose to the occasion and the side played the best game so far this season. The game should not have been lost and, had chances not been wasted in the closing minutes of a truly exciting game, Guy's might easily have won.

Coventry kicked off and much of the play centred round the middle of the field in the opening stages. When Coventry heeled the ball their backs were content to give it plenty of air. The marking of Guy's three-quarters was very keen and the Coventry attack did not get very far. Guy's on the other hand kept the ball close. Gwyn Thomas at fly-half put in some useful touch kicking which continually gained ground. Penalties were numerous and from one such award W. G. Davies gave the Hospital the lead with a good kick from 40 yards.

In the second half the tempo quickened and the game developed into a struggle between two tremendous sets of forwards. Guy's were very strong in the loose with Davies, Fairweather and Wilson prominent in forward rushes. The smothering tactics of the Guy's defence were most effective and the Hospital line never looked in serious danger. It was significant that Coventry did not get a single quick heel. As a result Ivor Preece, the former England captain and stand-off half, was severely handicapped. However, he dropped two goals for Coventry on the occasions when he had an inch of room near the Guy's 25. These, as it happened, won the game for them.

Guy's strove hard in the closing minutes to secure a score which might have drawn or perhaps have won the game but as fate would have it, it was not to be.

Guy's *v.* Old Cranleighans

At Thames Ditton. Result—Won 3—0
8th December, 1951

For this game Guy's were without the services of Davies, Wilson and Cremin in the pack and W. J. Howells at full back. Pritchard came into the team instead of Howells and Osborn returned to the centre with Kingston on the left wing.

This game was played under frightful conditions of wind and rain and on a very muddy pitch. Such conditions had not been encountered previously this season.

Guy's kicked off into the wind in the first half and it was evident from the start that open play was completely out of the question. Guy's had the ball from every scrum, although the opponents' pack was heavier, and it was left to Thomas to gain ground with his kicking. There was no scoring in the first half.

In the second half, the game developed into one of kicking ahead and following up by the forwards and, when occasion demanded, the backs. The forwards gave an object lesson in this type of play and kept the play in the Old Cranleighans' half all the time. On one occasion when the ball came back to Thomas he made a brilliant break in their 25 and found Honey up with him to take the scoring pass. The try was not converted. It became increasingly difficult to pick out friend and foe alike but mention must be made of Labuschagne's hooking and Pook's untiring efforts in so capably leading a pack which supported him admirably.

Team : J. F. Pritchard ; E. O. James, J. W. Osborn, S. C. C. Scott, J. C. Kingston ; G. D. Thomas, G. L. S. Rankin ; J. W. Kirkbride, N. A. Labuschagne, D. K. Fairweather, J. C. Burt, C. W. Pook, H. C. Meredith, K. Wilderspin, D. P. Honey.

"A" Team Results

v. Coventry Extra 1st XV

At Coventry. Result—Lost 3—8

1st December, 1951

v. Lewes

At H.O.P. Result—Lost 3—6

8th December, 1951

CHESS

Guy's *v.* St. Bartholomew's

Result—Lost 2½—3½

4th December, 1951

Guy's		*St. Bart's.*
R. Selby	drew with	M. B. Watts.
D. Roberts	drew with	J. Cairns.
R. Calne	lost to	A. G. May.
J. Eastwood	beat	Goss.
P. Gregory	drew with	M. Lacit.
P. Hirsch	lost to	S. Licht.

Guy's *v.* John Lewis "A"

Result—Drew 3—3

26th November, 1951

Guy's		*John Lewis*
R. Selby	beat	A. E. Jones.
J. Cox	drew with	J. Dvais.
D. Roberts	lost to	E. Newmark.
R. Calne	beat	L. Stephan.
P. Gregory	lost to	J. Dybell.
K. Scott	drew with	D. Barlow.

ASSOCIATION FOOTBALL

Southern Amateur League

Guy's *v.* Kew Association

At H.O.P. Result—Lost 2—7
17th November, 1951

Guy's began confidently against a strong Kew eleven, but it soon became apparent that the home team would have to reproduce their best form if they were going to make any impression against a fast-moving constructive Kew side.

Alas, this was not forthcoming, and due to some tragic lapses by the Guy's defence, Kew were soon comfortably ahead.

Guy's were yards slower than their opponents and they still do not appreciate the advantage of closely marking opponents at throw-ins! Kew were well served by a thrustful half-back line who made the ball do the work and always found their men with admirable ground passes.

After the interval a general apathy seemed to affect the Hospital side. Cornhill tried to revive their spirits with two well-taken goals but by this time it was too late. Guy's must look to their defence.

Guy's *v.* Pearl Assurance

Away. Result—Lost 0—1
1st December, 1951

This was a game from which Guy's should have collected two points. Although the home side made some spirited attacks, the Guy's defence was firm under pressure, with Griffiths in goal making some fine saves. The forward line was on the whole most disappointing. They had many opportunities in the first half but refused to press home their attacks, and were given no second chances by their opponents, who were much faster on the ball.

In the second half with the sun and wind behind them, it seemed certain that Guy's would dominate the game. As so often happens however, these hopes were dashed to the ground by poor finishing and a general lack of determination by the Hospital forwards, the right wing being especially poor. The Hospital goalkeeper excelled himself by some very powerful clearances; and had no chance with the snap shot that gave Pearl the lead in the latter part of the game.

Team: J. Griffiths; A. Evans, J. F. Wylie; D. Ekelby, R. Lee, D. Matthews; P. Shea, D. Harris, A. Fearn, J. Brill, P. Southgate.

Guy's *v.* Kew Association

Away. Result—Lost 1—5
8th December, 1951

Guy's travelled to Osterley on a frightful day for their return match with Kew Association. The Hospital side gave a very much better performance than the last game with Kew, although they were a player short for most of the first half. Griffiths in goal gave the finest performance seen yet by a Hospital goal keeper; he was an inspiration to the whole team. Guy's were three goals down at half-time; but they had given a courageous performance under trying conditions and in the face of a strong wind.

After the interval, and with a full eleven, Guy's played good constructive football, and a fine goal by Maggs who was in good form was well-deserved. Guy's should have scored again when the outside left broke through and, with the whole goal at his mercy put the ball over the bar. Kew, who had a fine and fast constructive forward line, scored twice more; due to misunderstandings in the Guy's defence. All told three goals were given away because players will not clear first time. It is little use heading the ball to one of your opponents in the penalty area. But altogether everyone played for 90 minutes and it was encouraging to see the spirit displayed by this team; everyone played really hard to the final whistle. Watmore, who was injured in the first half, gave a creditable performance at left-back, which promises well for the future.

Hospital Cup

Guy's *v.* London Hospital

Away. Result—Won 8—0
21st November, 1951

This was the most encouraging performance by a Guy's team this year, for all players showed dash and determination, and gave of their best. Watmore opened the scoring early in the first half after a run down the wing, tapping the ball past the keeper with his left foot. This was soon followed by a beautiful ground shot by Maggs which gave the London keeper no chance.

London then attempted some spirited raids on the Guy's goal, but the defence were not giving away anything this day and, backed up by some excellent work by Lewis in goal, were competent to deal with all attacks. Guy's were soon on the attack again and goals by Harris, Burns and Maggs, further increased the score in the Hospital's favour.

After the interval it was much the same story with Guy's pressing London defence very hard. Harris and Cornhill further increased the lead, while later, Matthews scored direct from the corner flag. A most encouraging afternoon for the Hospital.

Team: J. V. V. Lewis; A. Fearn, F. J. Wylie; D. Lipington, P. Southgate, D. Matthews; K. Watmore, C. Maggs, B. Cornhill, D. Harris, P. Burns.

HOCKEY

Results

3rd November, 1951

Guy's *v.* Orpington

At Orpington. Result—Won 11—1

IInd XI *v.* Orpington

At H.O.P. Result—Won 5—3

IIIrd XI *v.* Westcliff

At Southend. Result—Lost 2—7

10th November, 1951

IInd XI *v.* Crostyx IInd

At H.O.P. Result—Lost 2—4

17th November, 1951

Guy's *v.* Gravesend

At H.O.P. Result—Won 3—2

IInd XI *v.* Gravesend

At Gravesend. Result—Lost 0—5

IIIrd XI *v.* Gravesend

At Gravesend. Result—Lost 0—11

24th November, 1951

Guy's *v.* Wallington

At H.O.P. Result—Drew 3—3

IInd XI *v.* Wallington

At Wallington. Result—Won 4—2

Hospital Information, etc.

APPOINTMENTS VACANT

GUY'S HOSPITAL

The Board of Governors of Guy's Hospital invite applications from registered Dental Practitioners for the following appointments to commence duties as soon as possible :—

Department of Preventive Dentistry :—

2 Registrars with attendance on 3 sessions each per week.

1 Registrar with attendance on 6 sessions per week.

Salaries will be at the rate of £775 per annum in the first year and the posts will be subject to the Terms and Conditions of Service of Hospital Medical and Dental Staff in the National Health Service.

Forms of application are obtainable from the Superintendent, Guy's Hospital, London, S.E.1, to whom applications should be sent not later than **Friday, 4th January, 1952.**

ORTHOPÆDIC DEPARTMENT

Applications are invited for the post of **Orthopædic Registrar,** whole-time, with duties at Guy's Hospital and Orpington Hospital. Grade : Senior Registrar. Duties to commence on **January 15th, 1952.** Forms of application, which can be obtained from the Superintendent, Guy's Hospital, London Bridge, S.E.1, should be sent in, accompanied by the names of two referees, not later than **December 24th, 1951.**

AWARD OF BLUES

At the meeting of the Clubs' Union Council held on Friday, 12th October, the following Blues and Half Blues were awarded :—

	Full Blues	*Half Blues*
Athletics	E. O. James	P. J. Frost R. Salmon J. C. Burt E. E. Smith E. W. Birch E. A. Orsmond I. D. Hudson
Cricket	D. M. E. Allan H. Bissoon-Dath N. R. Cooke W. J. Howells	M. A. C. Lyon
Boxing	A. H. Atkinson B. J. Cremin N. M. Halamandres W. H. Watson T. M. Winstanley	M. H. N. Bishop
Lawn Tennis		P. J. Frost J. A. Bullard W. E. Thomas
Fencing	B. L. Mallett P. Sykes	I. Fuller
Rifle	D. G. Thomas	
Swimming	F. L. Richards	D. Coppock

DENTAL CLINICAL MEETING

The Annual Dental Clinical Meeting will be held in the Dental Department on **Saturday, 1st March, 1952,** and the Dental Society Dinner will be held in the evening. A detailed programme of the Meeting will be published in the *Gazette* on 26th January, 1952, and notices regarding the Dinner will be circulated in the near future.

PAPERS BY GUY'S MEN

Bishop, P. M. F. Pseudohypoparathyroidism. *Proc. R. Soc. Med.*, 1951, **44,** 952.

Bradley, W. H. Discussion on Social Medicine. *Proc. R. Soc. Med.*, 1951, **44,** 909.

Bradley, W. H. The Antagonism between Jaundice and Rheumatism. (The Heberden Society. Clinical Meeting.) *Ann. rheum Dis.*, 1951, **10,** 230.

Campbell, Maurice. Visible Pulsation in Relation to Blood Flow and Pressure in the Pulmonary Artery. *Brit. Heart J.*, 1951, **13,** 438.

Ebsworth, J. S., and another. Recovery of a Newborn Child from Bact. Coli Meningitis. *Lancet.*, 1951, ii, 914.

Grant, R. T., and Armin, J. Observations on Gross Pulmonary Fat Embolism in Man and the Rabbit. *Clin. Sci.*, 1951, **10,** 441.

Harding, H. E., and another. Pneumoconiosis in Boiler Scalers. *Brit. J. industr. Med.*, 1951, **8,** 256.

Hunt, J. N., Macdonald, I., and Spurrell, W. R. The Gastric Response to Pectin Meals of High Osmotic Pressure. *J. Physiol.*, 1951, **115,** 185.

Hurwitz, I. M. Gerontology and Geriatrics. *South African med. J.*, 1951, **25,** 767.

Kauntze, R., and Trounce, John. Treatment of Arterial Hypertension with Veriloid (Veratrum Viride). *Lancet*, 1951, ii, 1002.

Matthews, E., and another. The Impact Strength of Acrylic Denture Base Materials. *Brit. dent. J.*, 1951, **91,** 240.

Missen, G. A. K., and another. Scrub Typhus in Korea. *J. R. Army med. Cps.*, 1951, **97,** 227.

Moffatt, P. McG. Discussion on the Education and Employment of the Blind and Partially Sighted. *Proc. R. Soc. Med.*, 1951, **44,** 980.

Reeve, E. B., and another. The Plasma in the Packed Cell Column of the Hæmatocrit. *J. Physiol.*, 1951, **115,** 129.

Shaw, A. Batty, and MacKay, H. A. F. Double Enteric Infection (La Fièvre Typhoide Intriguée). An Account of an Epidemic. *J. Hyg. Camb.*, 1951, **49,** 299.

Shaw A. Batty, and MacKay, H. A. F. Factors Influencing the Results of Blood Culture in Enteric Fever. *J. Hyg. Camb.*, 1951, **49,** 315.

Simpson, Keith. Dental Evidence in the Reconstruction of Crime. *Brit. dent. J.*, 1951, **91,** 229.

Stevenson, F. Harwood. Nerve Nipping at the Intercostal Margin. *Lancet.*, 1951, ii, 969.

Stewart, I. McD. G. Systolic Murmurs in 525 Healthy Young Adults. *Brit. Heart J.*, 1951, **13,** 561.

Thompson, R. H. S., and Tickner, A. The Occurrence and Distribution of Mono-Amine Oxidase in Blood Vessels. *J. Physiol.*, 1951, **115,** 34.

Tillman, W. G., and others. Poikiloderma : A Benign Variant. *Trans. St. John's Hosp. Dermatol. Soc.*, 1951 (Oct.), Number 30, p. 22.

Whillis, J. Some Aspects of Rehabilitation. *Physiotherapy*, 1951, **37,** 243.

SOCIETY OF APOTHECARIES OF LONDON

Dr. P. M. F. Bishop has been elected to the Livery.

PASS LIST

UNIVERSITY OF CAMBRIDGE

M.D.

D. M. Jackson

ROYAL COLLEGE OF OBSTETRICIANS AND GYNÆCOLOGISTS

Diploma

R. H. Bolton
P. H. Bright
K. R. J. Coates
G. E. Haward
M. S. Kay
R. G. Watson

UNIVERSITY OF LONDON

Third (*M.B.*, *B.S.*) Examination for Medical Degrees

October, 1951

Pass

R. J. O. Catlin
J. W. Comper
K. V. Cooper
M. J. Craft
R. L. Edwards
G. H. Fisch
E. S. Foote
J. C. Gazet
H. Gold
C. A. Higgins
E. T. Johns
G. Karpusheff
P. F. P. Lansdown
D. Lennie
M. M. Lubel
P. L. Pelmear
E. J. Rolls
W. E. D. Smyth
M. A. Sorefan
J. Woodford

Part I

R. K. Allday
P. K. M. Barrett
F. J. Bateman
L. H. Brearley
C. P. B. Brook
R. W. Brotherwood
C. V. Bullen
E. E. Clapham
J. Eastwood
P. S. Elias
F. C. Emberton
L. L. Emery
Elizabeth Fincham
A. I. Fram
P. M. Hardiman
D. C. Harris
E. G. Haydon
E. R. Herst
Josephine C. M. Heylen
B. G. Jackson
P. E. Kapff
A. V. Large
D. A. F. McGill
I. Macmillan
B. L. Mallett
H. St. J. Mansbridge
G. A. Marin
Eleanor Morrison
E. A. Murray
Joan M. Newton
C. H. Opie
Millicent J. Pentney
H. S. Reeve
D. S. Robinson
J. E. Scriven
G. L. Shaw
F. C. Shelley
G. B. Skinner
A. J. Smith
R. C. Smith
E. C. Spencer
A. E. Strigner
Joyce D. Waye
Ingeborg R. Wiernik
D. C. Wilkins

Part II

T. K. H. Burnham
W. G. Lewis
R. A. J. Webb
R. S. Wells
P. A. Zorab

Part III

J. R. Robinson

CONJOINT BOARD

L.R.C.P., M.R.C.S.

October, 1951

A. Ross, B.D.S., L.M.S.S.A., has completed the examination

ROYAL COLLEGE OF SURGEONS OF ENGLAND

L.D.S.

Final Examination

October, 1951

Surgery. Part I

A. Allison
E. J. Artes
D. E. Blake
E. F. Bosson
J. M. G. Cameron
F. L. Coker
K. R. Dixon
M. F. Dixon
S. W. Edworthy
J. E. Gresham
D. R. Habberfield-Bateman
H. J. Halestrap
G. R. B. Ingram
A. F. Jones
L. W. Kay
H. C. F. Meyer
D. H. O'Flynn
A. G. Orme
R. H. Pownall
A. G. Prince
N. H. Reeves
C. F. M. Robinson
H. G. P. Ryan
J. M. Scoones
A. T. Tarrant
J. E. Throssell
M. S. Tyrell
G. E. Wade
C. W. White
G. M. J. Williams
G. Maggs

Dental Surgery. Part II

P. R. Allen
S. G. Baker
S. G. Brangwin
H. Carter
K. S. Chambers
M. H. Ede
M. Ellis
J. R. Flynn
W. D. P. Flynn
D. C. L. Grigsby
H. R. Harvey-Moffatt
D. G. James
H. Jones
R. B. Jones
J. C. Leckie
R. R. Lewis
A. W. McCandlish
J. C. Matthews
S. F. Mitchell
M. H. O'Connell
J. C. Petty
W. C. Porter
H. R. Prentice
G. S. Rose
E. G. Searle
J. C. J. Sheppard
E. G. M. Stillwell
G. K. Taylor
J. E. Throssell
C. J. Walker
Dorothy E. M. Warner
G. F. Willcox

CHANGES OF ADDRESS

W. J. Lewis, M.R.C.S., L.R.C.P., Van Diemen's Lodge, Lansdown Road, Bath, Somerset. Tel.: Bath 4534.

L. G. C. Martin, M.B., B.S., Sedan House, Stanley Place, Chester (residence and consulting). Tel.: Chester 25525.

D. M. Rahilly, M.R.C.S., L.R.C.P., Dulverton, 70, Finborough Road, Stowmarket. Tel.: Stowmarket 358.

BIRTHS

HAMILTON.—On October 8th, 1951, at the City Maternity Hospital, Gloucester, to Margie, wife of Harry Hamilton, M.R.C.O.G.—a brother for Jonathan.

MELIA.—On November 1st, 1951, at Trevalyn Manor, Nr. Chester, to Jacqueline, wife of E. W. Melia, M.B., B.S.—a son (Anthony Brian).

POWER.—On November 25th, 1951, at Radley Lodge, Winbledon, to Joy (née Parkes), wife of Norman Power, M.R.C.S., L.D.S.—a son.

SALVI.—On December 8th, 1951, at Bournemouth, to Josephine (née Cant), wife of Anthony Salvi, M.R.C.S., L.R.C.P.—a daughter.

WILLIAMSON.—On October 28th, 1951, to Margaret (née Morrison), wife of John R. Williamson—a brother for Peter and James (Michael Paul).

MARRIAGE

MARTIN—BOLAM.—On October 4th, 1951, at Upton Parish Church, Leonard Geoffrey Cadoux Martin, M.B., B.S., to Rosemary Janet Bolam, M.B., Ch.B.

EDS. { R.G. P.A.Z.

GUY'S HOSPITAL GAZETTE

A JOURNAL OF MEDICINE, SURGERY, DENTISTRY AND HOSPITAL NEWS
PUBLISHED FORTNIGHTLY

Vol. LXV. No. 1655 *29th December* 1951 *One Shilling*

PASSIM

THE end of a year is a natural time for reflection. One stands, as it were, between two infinities—the ageless past and the limitless future. This, though true of any moment, is sensed more strongly at such a moment than at other times. There are, to be sure, many places and many occasions when a sense of one's perspective in time comes upon us all. For some it may have been under the stars on a clear night. For others amid the calm of an ancient building or cathedral. Travellers abroad may have sensed it crossing the great deserts of the world, whilst visiting ancient cities, or in flight above the clouds. The musical may have known it listening to fine music. The sick whilst lying sleepless in the night. It is a wholesome sense, full, for some, of wonder, for others only of nostalgia ; yet others may have found in it a source of calm. It is at such moments that a man may stop to consider and reflect upon his own failures and achievements and upon his own worth. Introspection is the examination of one's own thoughts and more often than not is a bad thing. Reflection or contemplation is a good thing, and few doubt that all our future actions might be the better for more reflection on the past.

Yet, in a busy day the opportunities for contemplation—sometimes even for thought—are few enough. Necessity or ambition drives most of us beyond what, in others, we should envy or admire. With few is idleness thought to be commendable. Fewer still count it an achievement. Yet how many of the world's great thinkers or men of action, if they had tied themselves to a routine of incessant attention to detail such as shackles the medical man, would have succeeded in their tasks ? In medicine, however, the relationship between doctor and patient is one so much more personal than existing in any other profession except the Church that further delegation of the treatment of patients is neither possible nor desirable.

There are not always remedies for ills. Perhaps there is none for the overburdening of the Practitioner. Yet in spite of it how well worth while it would be if occasionally, when his work was done, an hour or two were spent idly in thought, writing no new book or thesis, leaving letters and telephone still unanswered, considering neither the problems of tomorrow nor today, but in contemplation of past days and years and ages. In so doing he might find something in common with the late President Roosevelt who, in times of stress and before retiring for the night, used, with a close friend, to contemplate the immensity of the night sky, recounting to each other the distances of the stars. By contrast the problems which beset them and their world seemed after all not insurmountable.

It will soon be the New Year. It might be no bad thing if we too resolved occasionally to turn our eyes aloft.

* * *

The news that a knighthood has been conferred on Dr. Geoffrey Marshall will have been noted with great pleasure by all Guy's men. The part which he played with Mr. C. Price Thomas who performed the operation on His Majesty and who has also been knighted, in restoring the King to health has earned for them not only the respect of their colleagues but the gratitude of the whole nation.

* * *

Our readers, especially students (at whose request it has been organised) are reminded that the Clubs' Union Ball takes place on Friday, January 11th. The hard work put in by the organisers and the support being given by members of the Staff make a highly successful Ball seem certain.

Obituary

MISS WINIFRED UPHAM

IN Southlands Hospital, Shoreham, Sussex, there passed away on Tuesday, November 27th, one who had in past years been a devoted servant of the Hospital—Miss Winifred Upham.

To few, if any, of the Guy's men of the last four decades, does the name Winifred Upham denote anything, but to an older generation of Guy's dental men, who were students before 1912, it will recall memories of a lady who virtually reigned supreme for 18 years in the day-to-day administration of the Conservation Room of the Dental School.

Miss Upham was appointed Chief Clerk in the Conservation Room in 1894, and retired in 1912. This period was one of the most important in the life of the School, for it had been founded only five years previously before Miss Upham took up her duties, and failure as well as success might easily have been the ultimate result of the venture.

That the School has now become world-famous is due in a great measure to the devoted work given to it in the early days of its infancy, and to no one more than Miss Upham.

On her retirement in 1912, the Dental Council placed on record their appreciation of her long and successful service during a period of great growth and development of the Dental School.

A lady of spare build, and never too robust, she was born on August 29th, 1863, and had, therefore, reached the ripe age of 88 years. Blessed with an abundance of tact, kindliness, good administrative qualities and general efficiency, she was well suited to deal with both patient and student, for administration of the Conservation Room in those days was, apart from two House-Surgeons, a single-handed task.

After her retirement Miss Upham resided in Worthing, and it was the writer's privilege to meet her on many occasions during this period of her life. She never failed to enquire after the School and those whom she knew when at the Hospital, and always evinced the greatest interest in the School's progress, and in the different changes that took place from time to time.

In the later years of her residence in Worthing, she lived with two other ladies at High Salvington, a delightful spot high up on the Downs at the back of Worthing, and it was here that a year ago she had a serious breakdown in her health, which necessitated her removal to a nursing home. After a partial recovery, she lived at Wineham, near Henfield, in the house of an old friend of the family, who tended and cared for her with great kindness, until her removal to Southlands Hospital, as the result of a fractured femur.

Cremation took place at Brighton on November 30th.

The deepest sympathy is extended to her relatives, and to those friends to whom she was so dear, and who were so dear to her. F.B.B.

GEOFFREY NOOTT, J.P., M.R.C.S., L.R.C.P.

DR. GEOFFREY NOOTT, who died recently, was a student at Guy's prior to and during the 1914–18 war and qualified soon after its termination. After doing house appointments at Guy's he went into practice at Ferndown near Bournemouth, where he remained until his retirement some years ago.

Geoffrey Noott was one of the most popular and well-known Guy's men of his day. His friendly, calm and unhurried temperament earned the respect and love of his patients and of all those with whom he came in contact. Busy though he was, he kept close contact with Guy's and seldom missed attending the Biennial dinner and the Thirty Club dinner. He was also a county magistrate and chairman of the court which dealt with juvenile offenders, where his medical knowledge and his kindly and understanding personality was of the greatest value.

In spite of indifferent health Noott was an enthusiastic motorist in early days, when motoring was an adventure. He also found time for golf and was captain of the Ferndown Golf Club. He was also a keen cricketer and was a member of the M.C.C. and in addition a very good shot. To all his numerous friends at Guy's his death is indeed a personal loss and a break with the past.

J.J.C.

Injection and Intubation Hazards

By NILS L. ECKHOFF, M.S., F.R.C.S.

A Clinical Lecture delivered in Guy's Hospital Medical School on 11th October, 1951

A MID-EUROPEAN doctor who had a very successful practice in London amongst the so-called intelligentsia used to start out in the mornings with forty syringes. This information came from his chauffeur whose job, amongst others, was to sterilise the syringes in the evenings. It is well known that in certain continental countries most medications are given by injections. From the occasional letters in the press from disgruntled patients I sometimes wonder if we are not leaning a little too much that way ourselves. One must always remember that fluids and other medicaments can be given by the mouth or rectum, and that the body is usually better able to handle substances administered in this way than those suddenly thrust into the circulation with a needle.

In 1933 I heard one of the first papers on continuous drip infusion at a Swedish medical meeting in Stockholm, read by a young Swede called Hindmarsh. About the same time the principle of continuous gastric suction was evolved by Wangensteen. In 1936, in a clinical lecture on intestinal obstruction, I pointed out how the mortality had dropped from over 40% to under 20% since the introduction of decompression by intubation. So little was its usefulness known at that time, that after the lecture one of the students asked my registrar, " Does anyone else believe in this intubation business ? " Today any surgical ward reminds one of the forest of masts seen at the fish jetty in Bergen.

The second world war taught us the tremendous value of these two adjuncts —intubation in the prevention of ileus in abdominal wounds, and intravenous injections for fluid replacement during suction and in the treatment of shock and burns. A variety of fluids were used for the treatment of shock and burns— blood, packed cells, plasma, serum, and saline and glucose in various strengths. The intensive study of blood taught us a great deal more about blood groups, the various sub-groups, and the Rhesus factor, so that blood transfusion is now recognised to be infinitely more complicated than simple recognition of the original four groups of Moss and Landsteiner.

In the early part of the war I described in a clinical lecture a case of jaundice following 2–3 months after ligature of the popliteal artery in an air raid casualty. This man had had much plasma. Although he was about fifty he did not lose his leg, but became very ill with the jaundice. Dr. W. H. Bradley of the Home Office got in touch with me and told me of the first experiences with jaundice following the use of convalescent measles serum, and kindly came down to see my case. It was shortly established that this and several other cases of jaundice that appeared (as well as the thousands in the American Army that followed yellow fever inoculation) were due to the use of pooled plasma, and the presence in such a pool of some unknown factor producing what is called homologous serum jaundice. It was my misfortune to lose a burnt patient who had had a lot of plasma, and the death from acute liver failure is one of the most startling and rapid that one can imagine. The danger of homologous serum jaundice is still with us, for despite much work on the subject it has not yet been entirely eliminated. A recent paper on this subject appeared in the British Medical Journal (Camps et alia, 1951).

Dextran (a polysaccharide of high molecular weight), introduced by the Scandinavians, may replace plasma for wholesale use in shock and burns, a matter of great importance in warfare. Its introduction reminds us of the use of gum acacia many years ago. This is still used in some obstetric clinics but not very often in the surgical wards. Other substances of high molecular weight are being developed today.

Saline also has its dangers. It might be thought at first that normal saline could be given intravenously over a reasonable period of time to replace fluid lost by one means or another. But it was soon learnt that in the course of one day a patient receiving, say, five litres, would soon be overloaded with sodium chloride. For prolonged infusions N/5 saline provides about the right amount of sodium chloride, and the quantity excreted in the urine is a rough guide to the correct amount. But N/5 saline passes readily through the capillaries, and is therefore but of temporary use in many instances, e.g. burns. The total volume of fluid given in twenty-four hours must also be carefully studied, for it is possible for a patient to be " drowned " by too much intravenous fluid, as I have seen happen. A patient with intestinal obstruction due to bands was admitted to another hospital a few days before I was due to leave for my holiday. The obstruction had been neglected for 48 hours, so intestinal decompression and intravenous drip transfusion was set up. For a few days after operation the patient was remarkably well, and I went away happily. I was horrified to find on my return that he had died on the tenth day of " pneumonia ". On examining the charts I found that his bowels had acted and he was set fair for recovery, but the intravenous fluid had been allowed to flow unchecked. On the day before his death he had received eleven pints.

Apart from studying the quantity of fluid given in every twenty-four hours and the quantity of sodium chloride therein, a close watch must be kept on other electrolytes—notably potassium deficiency. Careful study of the blood chemistry is necessary to avoid this danger, and the advice of the bio-chemists is invited in all suspicious cases.

Mrs. R. M., aged 37 years, was admitted to Guy's in February, 1950. She had had symptoms of ulcerative colitis since 1947. Medical treatment had brought about some remissions, but the symptoms restarted with renewed vigour in January, 1950, with abdominal pain, high temperature and much blood and mucus per rectum. There were two outstanding features :—Aphonia, and enormous distension of the colon. Sigmoidoscopy revealed a very œdematous weeping mucosa. Ileostomy was performed on 10th March, 1950. Although the stools were markedly reduced in number, she continued to lose much fluid through the ileostomy and per rectum. This was to some extent made good by transfusions and infusions of various sorts.

Twelve days after the operation she began to become irrational and restless at night, and her voice disappeared entirely at times. She also had photophobia and neck rigidity. Next day she was much improved, and remained reasonably well for a day or two, when she once more became irrational and later comatose.

The full signification of these symptoms was not recognised until her blood chemistry was investigated by Dr. Reeve who found a much lowered plasma bicarbonate and serum potassium. In spite of belated attempts to restore the blood potassium, she sank and died on 4th April, 1950.

This was the first time I had become aware of the signification of potassium deficiency. It can occur in any patient suffering an excessive loss of body fluids, such as is produced by diarrhœa or prolonged gastric or duodenal suction. The symptoms are lassitude, muscular weakness, irrational behaviour first noticed at night, and later coma. Potassium replacement cannot be instituted rapidly, and is best organised in consultation with the bio-chemists.

It is today possible to keep a patient alive for several weeks by intravenous medication alone. There are instances where this may be of great value, for by avoiding the intake of any nutriment by the mouth, intestinal movements can be almost completely eliminated. Regulated doses of amino-acids are added to the transfusion fluid. One disadvantage is that the veins tend to clot much more rapidly than with other medications. Thrombosis of the vein used for infusion can be a great nuisance. It occurs less rapidly with saline, more rapidly with glucose, and most rapidly with amino-acids. A recent review indicates that to prevent thrombosis the veins should not be used for more than eight hours. (Constant changing of the needle is dreaded by the patient, just as repeated injections of penicillin or any other drug are dreaded.) It is true that such thromboses usually remain fairly well localised. I have, however, seen suppurative thrombosis, leading to fatal pyæmia, after infection of an infusion incision. One has also seen widespread thrombosis not limited to the site of injection following simultaneous ligation and injection of varicose veins, or even the injection of an intravenous anæsthetic, or radio-opaque solution.

The injection treatment of varicose veins has, as you know, been in use since about 1926. Various substances have been used—at first quinine and urethane, later sodium morrhuate and now usually æthenolamin. Other substances have also been used. Some of these drugs produce general symptoms but the last-named seems relatively free from general reactions. The risk of producing embolism seems to be very slight and this is probably due to the fact that the patient is usually kept ambulant. As above mentioned, an injection in the recumbent position may produce a thrombosis of the deep veins even spreading to the inferior vena cava.

I was called to see a young girl aged 18 years who had a ligation of varicose veins and retrograde injection, plus a simultaneous injection in the calf. She developed acute arterial spasm to such an extent that the life of the limb was in some danger. The spasm was relieved by paravertebral sympathetic block which had to be repeated for two to three days. Fortunately no gangrene developed except for superficial skin loss on the toes. It is now realised that injections alone are often unsatisfactory in people with varices (where surgery may be indicated) and there are some who consider that injection treatment should rarely be given.

There was a craze at one time (which never took a firm hold in this country) for injection treatment of hernia. From the knowledge of the anatomy of the average hernia it would seem very unlikely that this method could be really satisfactory and it does not commend itself to me. The theory was to produce a mass of fibrosis around the neck of the sac and thereby cure the hernia. I have heard of a case where the scarring was so intense that it produced a thrombosis of the femoral artery with gangrene of the leg.

Injections have also been tried in the treatment of hydrocœle. One vicious solution was a mixture of pure carbolic acid and strong iodine. This certainly produced an intense reaction and if a drop was spilt on the skin was apt to produce burning. Recently an article has appeared in the press describing injection treatment with æthanolamin with reasonable success in about half the cases. Since the operation for hydrocœle is often followed by a rather large reactionary swelling it might seem that the injection treatment has a place in this condition.

Injections for hæmorrhoids are more firmly established. There is no doubt that they can keep a patient reasonably comfortable for a number of years if the hæmorrhoids are of moderate size and uncomplicated. But there is a patient in the ward at the moment who had an injection for hæmorrhoids and suffered thereafter a very diffuse sloughing proctitis. It was clear in his case that a perforation of the anal canal had been produced, no doubt due to the placing of the injection into the muscle coat. When the injection treatment for hæmorrhoids was first introduced a 20% solution of Phenol was injected into the pile often producing rather unpleasant results. Today a 5% solution is injected into the submucous tissue above the hæmorrhoid. This must be checked by moving the needle point about freely. Pain during injection is a sign of danger. Remember that any injection in the anal region may be followed by serious inflammation. Certain anæsthetic solutions have been used in the treatment of anal fissure. I know of at least two cases in which sloughing proctitis ensued requiring colostomy.

I can see no place for injections in the treatment of ganglia or enlarged bursæ. The former is a myxomatous degeneration of the fibrous part of the tendon sheath or capsule and there is no endothelial lining. The latter is generally closely related to a joint where an injection might be intensely dangerous. Likewise an attempt to overcome extensive laxity of the temporomandibular joint by injection of sclerosing substances around and into the joint appears to be fraught with too much risk.

Subcutaneous or intramuscular injections are not entirely free from risk. Certain substances are injected into or under the skin and may produce sloughing. Repeated injections, either subcutaneous or intramuscular, may produce abscesses. The methods used for the sterilisation of needles have been subject to much study recently. Practitioners report that they have had no complications with relatively simple methods of sterilisation, such as rinsing the needle in alcohol and ether. Rinsing in warm oil is a good deal safer and boiling is reasonably satisfactory, but dry sterilisation is thought to be the best method of all. As this is inclined to melt the solder in syringes, all-glass syringes are more satisfactory. The use of sterilising fluids is not thought to be adequate, particularly if there has been blood or pus in the syringe or needle. Injections of bismuth or mercury into the buttock may be only partially absorbed.

I have heard of a patient with such a collection of mercury in the buttock who fell upon this part and developed acute mercurial poisoning ! Arsenical and other drugs allowed to leak into the subcutaneous tissue may produce a very severe tissue reaction. Injections have occasionally been made into the brachial artery (in mistake for a vein) and led to traumatic arterial spasm, with gangrene of the limb.

Sensitivity to penicillin is now well known, whereas streptomycin given unwisely may induce resistance in the organism it is wished to destroy. These valuable drugs should never be given unless there are absolute indications. A patient recently discharged has anæsthesia over the territory of the lateral femoral cutaneous nerve, following penicillin injections. Another had radial nerve palsy which took many months to recover and led to an action for damages. Sciatic palsy has also been described.

Odd plaques of fibrous or calcified or ossified tissue may remain for years following injections. A patient in the hospital at the moment (under Sir Heneage Ogilvie) has enormous plaques in both arms where she is said to have had camphor injected during an attack of appendicitis.

The broken injection needle is another hazard. It can be amazingly difficult to recover, particularly as it is usually placed in the upper arm or thigh, where accurate localisation is impossible. In many instances its removal should not be attempted. Be particularly wary of removing it under the fluourescent screen. Frightful X-ray burns have been known to occur in the patient and surgeon.

It is not my intention to frighten you by recounting all these experiences, but if you can instil in your mind the thought, " Is this injection really necessary ? " I feel I have served a useful purpose.

INTUBATION

I have earlier indicated the tremendous value of intubation in certain circumstances, but I cannot be entirely happy about its use in each and every abdominal case. Today it is customary to bring all gastric cases to the theatre with a tube already in position, and I must confess that it is a comfort to have it in the stomach for at least a short while after the operation. But I reflect that of the many gastric resections done before this present vogue, there were but few in whom the tube was subsequently required. The difficulty seems to be to know how long to keep the tube in place. We are at present endeavouring to remove it at the earliest possible moment, so early that intravenous therapy may be unnecessary, or at least minimal. I shall perhaps not be happy until its use for gastric cases can be avoided altogether. I know that it will still be necessary for cases of intestinal obstruction and ileus. The latter cases are more common in some clinics than in others. The tendency for the tube to curl up in the stomach, or even to tie itself into a knot, is known to all house surgeons. To get the tube into the duodenum it is usual to turn the patient on the right side, hoping that gravity will help. The use of magnets has also been suggested. A more reliable method seems to be to empty the stomach, advance the tube a few inches, and give draughts of water. In an empty stomach this should urge the tube in the right direction.

I have under my care at the moment a case of œsophageal stricture, the symptoms of which commenced ten days after an operation performed elsewhere in which a small tube was left in the stomach for three days to prevent ileus. There is another case in the hospital (under the care of Mr. Grant Massie) with œsophageal stricture, where the tube was left in for a much longer period (18 days). I have had another case (which unfortunately came to post-mortem from pulmonary embolus) where an œsophageal ulcer followed an indwelling tube, kept in place three days. Such cases are, of course, rare, but their occurrence is worthy of recognition, since they produce a great deal of suffering and their treatment is none too easy. Intubation, like intravenous or other injection, should never be instituted light-heartedly, in the absence of definite indications.

All the mishaps that I have mentioned to you today both in relation to injection therapy and to intubation might well lead to medico-legal complications.

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Correspondence

Memories of Guy's

SIR,—The delightful records of Guy's memories by my old friend and fellow student, Stanley Copley, and by A. R. Thompson, have revived my recollections particularly of Jacobson, whose house-surgeon I was at the Royal Hospital for Women and Children in Waterloo Bridge Road. This hospital with its seventy beds was, through Jacobson's influence, for many years a preserve for Guy's men as regards its post of resident. At that time the single resident was H.P., H.S. and occasionally obstetrician rolled into one, with frequent anæsthetics, and many out-patient sessions as well. As an experience it was unrivalled.

My immediate predecessor as resident was Edgar Huntley, a most promising young surgeon who afterwards practised in Suffolk. He had been H.S. to Davies-Colley before going to the Waterloo and when the post again became vacant, I happened to be down in the country. Another Guy's man applied to Jacobson, who nominated him and he was appointed. Jacobson had arranged an operation at 9.0 a.m. for the first day on which he was to take up his duties. Huntley was to assist Jacobson and the new man was to give the anæsthetic. Half way through the operation the anæsthetist crashed to the floor in an epileptic fit, narrowly escaping a collision with the instrument steriliser, which was a fish-kettle quietly simmering on a gas ring, just behind him, in the little theatre. Huntley rushed to take his place and found the patient's pupils were already pin-point (chloroform was being given) and no more anæsthetic was required during the remainder of the operation. Resignation of course followed. By that time I had returned to Guy's, and the outgoing man advised me to apply for the post, adding that the excitement of his first morning's duties, coupled with a hang-over from a rather merry night before, had aroused to activity a dormant trouble of years past. Jacobson accepted me and Huntley carried on till I could join. Jacobson was a delightful surgeon to work under and I thoroughly enjoyed my eighteen months under him. He dearly loved a joke with a classical flavour and one day told me of three members of the profession who were discussing the red bulbous nose of another man. The first said he thought it was lipoma nasi, the second said it was due to drink, but the third said, " I consider it a case of ' dam-nosa hereditas '." Often before a private operation at a West End Nursing Home he would give a breakfast party to one or two dressers and possibly a house-surgeon, at his house in Great Cumberland Place, near the Marble Arch. Mrs. Jacobson and some of their Dandi dinmont terriers would enliven the party and we all would go home with golden guineas in our pockets.

The Waterloo staff consisted of Jacobson as full surgeon, Marmaduke Shields of St. George's as assistant surgeon, a physician and two assistant physicians, and one most able gynæcologist, W. J. Gow, originally a Bart's. man but later on the staff of St. Mary's and Queen Charlotte's. Gow was a most successful abdominal surgeon : he took me as his guest to a meeting of the old Royal Medico-Chirurgical Society—later to become the present Royal Society of Medicine—at which meeting Gow read a paper based on a consecutive series of fifty successful ovariotomies, quite a feat for those pre-aseptic days, without sterilised sponges, swabs, dressings, overalls, or rubber gloves. We used marine sponges, wrung out of one-in-twenty carbolic lotion in bowls held by nurses. After an operation, our hands were in consequence as rough as files. One man, who was rather fussy about his hands, used to sleep in cotton gloves wrung out of glycerine.

One day when we were discussing antiseptics, Gow told me that whenever he proposed doing a Cæsarean at Queen Charlotte's he always went down early to the hospital, and swabbed out the sponge bowls and instrument dishes himself with carbolic lotion, to make sure all was in order.

At the same hospital was a little page-boy whose duty it was to escort the women commencing labour to the wards, and he used to murmur in their ears, " Breathe 'ard, ma'am, as you go upstairs, or they won't keep you in."

When in middle life Gow, as a bachelor, played with the idea of retiring he obtained leave from his three hospitals for six months of absence, after which he would decide whether to give up work or not. When the six months were up, he decided to retire, and went to live in Devonshire. Being very fond of riding, one day he rode with a friend up a grassy rise. At the stop they stood still, gazing at the view, when suddenly Gow fell off his horse, dead.

The cooking at the Waterloo in my time was atrocious, chiefly because this work always devolved on the wife of the hospital porter for the time being, regardless of her fitness for the job. On one occasion, a housemaid dropped an apple-pie down the shaft of a small lift, to the basement, two floors below. The pie-dish was smashed to atoms, but the crust rolled on its edge some distance along the floor and was picked up uninjured.

In 1897 we had a small outbreak of diphtheria among the nurses. The committee decided to have the drains tested and left arrangements to the secretary who asked me what he should do about it. I suggested calling in the Medical Officer of Health for Lambeth, in whose district we were, and offered to go and see him. When I asked him if he would come, he looked sternly at me, and said he hoped we would have enough money to carry out his recommendations. I gaily replied, " Yes." The sanitary squad soon came along, and one of the first things they found was that the roof and walls of an old brick sewer, which received the drainage from a pathetically squalid alley at the back of the hospital, had collapsed as it passed under the building, which in consequence rested over a gigantic cesspool, continually being fed and slowly emptying itself by percolation into the sodden ground. The hospital was closed for some months while the sewer was diverted and the morass effectually sealed down by a thick covering of cement. All this cost the Borough of Lambeth £1,700, quite a large sum at that time.

Being the only resident in the hospital it was always difficult to leave it, even for a short time, and we had a standing arrangement with the equally solitary resident of York Road Lying-in Hospital, whereby we could, on rare occasions, " look out " for one another in emergencies.

Frequently the only way to get a little fresh air was to climb up to the flat roof of an evening, smoke a pipe, and look out over the dimly lit London of the last century. As we were near the river, and at the top of quite a high building, one could often spot the light of distant fires on a dark summer's night, which were common enough then. There was a large fire-service station a little lower down Waterloo Bridge Road, and one day, when one of the firemen came in to visit his wife who was an in-patient, I took the opportunity of showing him round the hospital, and of obtaining his expert opinion on the structure. When we came to the top floor where all the childrens' wards were —both medical and surgical—he put his head out of the window, looked sadly down at the ground, and said, " There isn't a fire-escape in all London long enough to reach this ! " Soon afterwards the hospital was pulled down and the present handsome structure erected in its stead.

Yours, etc.,

14, Clarendon Road,
Southsea, Hants.

M. ASTON KEY.

The " Gazette "

SIR,—I have been a reader of Guy's *Gazette* ever since 1893, when the printing and paper used for it were both good. Is it not possible to have our *Gazette* something near that condition now ? Every week we receive by post instances where publishers have not acted so strictly in such economy ; surely we can have it more easily readable ! My wife, née Nurse Hinckley, and I both have very good sight, but it is quite a strain to read such small print !

I know you have had many complaints from your readers since the paper shortage has been somewhat easier, so why not make a bold move for the better ?

Yours, etc.,

" Southolm,"
29, Ridgeside Avenue,
Withdean, Brighton, 6.

C. J. HINCHLIFF.

Guy's Rugger

SIR,—I am horrified to learn that the sporting efforts of Dr. Lewis and Mr. Fouraker have met with such disappointing results. In the past the Captain ordered training on Wednesdays and those who absented themselves were dropped. Further, the late Dr. Cameron and Dr. " Pye " Alyburgh used to get us into the gym. every lunch hour for skipping and boxing.

There is many an old Blue who, like Dr. Alexander, are hurt by the continual reference to our fall from grace in the rugger world. We looked hopefully at the coaching teams which were liberally spattered with Guy's names ; but alas, they do not appear now.

It is to be hoped that the Senior Staff will give every encouragement to students with a flair for the game.

Yours, etc.,

F. T. WILKINSON.

Pipes Place, Shorne,
Nr. Gravesend, Kent.

SIR,—In your issue of October 20th, 1951, Dr. B. Halley Stewart suggests that P. G. McEvedy, who recently died, was the famous Guy's Rugger player.

This is not so, as the great centre three-quarter, probably the most complete footballer ever to play for Guy's, was P. F. McEvedy, whose death in New Zealand was reported a few years ago. He was already out of his year in the cup tie season of 1906 and must therefore have preceded P. G. McEvedy at Guy's by many years.

Incidentally, the proposal to increase the period that a player could represent his Hospital from five to seven years was not agreed to by other hospitals until McEvedy and his equally famous wing, Teddy Morgan, were both safely out of their year. Further tribute to their prowess is unnecessary.

It may be of interest to note that, although McEvedy was a reserve at different times for both Ireland and England, he never received an International cap. Both countries were then reluctant to play a New Zealander. This reluctance was shortly afterwards overcome by England and Scotland in the case of other players from New Zealand and South Africa. McEvedy may safely be called the best player never to get an International cap.

Yours, etc.,

F. C. HUNOT,
Surg.-Capt., R.N. (retd.).

The Little Field,
Green Lane, Tavistock,
Devon.

SIR,—I should like to take the opportunity of the present correspondence on "Guy's Rugger" to congratulate Mr. Davies and Mr. Pook on the vigorous and not unsuccessful efforts they have made to build up a really workmanlike side without ready-made stars. By a strange irony the letters of Mr. Eckhoff and Dr. Alexander in your issue are followed, on the next page, by an account of three matches played by the Guy's team, the results of which argue a very high standard of performance and one of which any hospital might be proud ; to hold a side like Coventry to 3–6 is no mean achievement. Dr. Popplewell, himself a stirring captain and magnificent forward, may remember the side in which he led the forwards against Coventry in 1929, which contained Windsor Lewis of Wales at stand-off half, R. A. B. Hogbin, the Middlesex forward, J. Kunovsky a forward who played for the combined South African Universities which defeated the " All Blacks ", and T. Hale-Munro of Wakefield's R.A.F. team at full-back, a side which was shortly to be joined by Guy Morgan, the Welsh International centre, and J. E. Giesen, a New Zealander who played for London against the " Springboks ". The crowds flocked in to watch these stars but, nevertheless, on that occasion we were beaten by ten points.

I don't believe there is anything wrong with " Guy's Rugger ", when a side composed largely of players without many years' experience of first class football can fight it out with teams like Coventry and the London Irish to such good effect. I personally get more satisfaction from watching this side play than some of those brilliant sides in the dim distant past, long before Dr. Popplewell's day, which I seem to remember were sustained in part by delightful characters who, whatever their renown on the football field, would not have survived in the more rigorous atmosphere which prevails in other departments of the hospital today.

Yours, etc.,

27, Chester Terrace,
Regent's Park, London, N.W.1.

H. J. B. ATKINS,
Vice-President, Rugby Football Club.

UNDER WAY

To see the slimy cable chain,
To heave her to the pawl ;
Bring up the slack, and take the strain
And through the water crawl.

The sea-drops chant from off her bows
As deep-sea water can ;
Smoothly she goes as Trade Wind blows
With shaken sail to fan.

The good ship swings herself to sea,
The long comber to face ;
The land-loom lies upon her lee,
Astern of the cro'jack brace.

—J.C.D.

December		**ACADEMIC**
		Exhibition. Surgical Department. " Incisions and Suture Materials."
31st	1.00.	Dr. Campbell. Clinical Lecture. " The Place of the Electrocardiogram in Medicine."
January		
		Exhibition. Surgical Department. " Peptic Ulceration."
		Exhibition. Ear, Nose and Throat Department. " Acute Otitis Media."
3rd	1.00.	Mr. Eckhoff. Clinical Lecture.
	5.00.	Mr. Murray Falconer. Neurosurgical Demonstration. Clinical Theatre.
	5.00.	X-Ray Meeting. Gordon Museum.
4th	1.00.	Sir John Conybeare. Clinical Lecture. " Subacute Bacterial Endocarditis."
7th	1.00.	Dr. Harris. Clinical Lecture.
	5.00.	Surgical Department. Film. " Secondary Shock." Clinical Theatre.
8th	1.00.	Mr. Blackburn. Clinical Lecture.
10th	1.00.	Dr. Lloyd. Clinical Lecture.
	5.00.	X-Ray Meeting. Gordon Museum.
11th	1.00.	Dr. Campbell. Clinical Lecture. " The Surgery of the Heart."
12th	10.00.	Surgical Department. Medico-Surgical Demonstration. Clinical Theatre.
14th	1.00.	Dr. Munro. Clinical Lecture.

January	**SPORT**
5th	Rugby 1st XV *v.* Old Merchant Taylors. (H.O.P.)
	ENGLAND *v.* SOUTH AFRICA. (Twickenham.)
	ENGLAND *v.* SCOTLAND. (Twickenham.)
12th	Rugby 1st XV *v.* Wasps. (H.O.P.)
	Rugby Extra "A" *v.* Wasps Extra "A". (H.O.P.)
	Rugby Wanderers *v.* Old Caterhamians. (Caterham.)
	Rugby " B " XV *v.* Old Paulines " B ". (Thames Ditton.)

A Surgical Ward Clerk in 1900

By P. N. B. ODGERS

ON January the 1st, 1900, I commenced my appointment as one of two ward clerks to Mr. Jacobson. None, who ever worked under that outstanding figure, and I was successively his ward clerk, his dresser and his House Surgeon, would, I venture to think, even after the lapse of years, dare to omit the Mr., and I shall refer to him in these notes as Mr. J.—the abbreviation he himself always used when he dictated the notes of an operation to one of his clerks.

The surgical ward clerks had had an hour's instruction a day or two before from that kindly but exacting Registrar, McGavin—he was, of course, the only one in those days—and had furnished themselves from a small shop in Newcomen Street with a case of instruments and a battery of four 3-minute thermometers. Our day in the wards, Naaman and Dorcas with some accidents in Cornelius and Astley Cooper, commenced as soon after nine thirty as possible. Between nine and nine-thirty we should have attended Bellingham-Smith's classes in practical morbid anatomy or Lauriston Shaw's demonstrations on recent specimens from the P.M. room.

One's first duty was to take temperatures. The ward clerks were responsible for the morning and evening temperature of any patient who was not on a four-hourly chart. Next, if a new patient had come into one of his beds overnight, the clerk had to hurry to get some notes written for McGavin, who might arrive at any time after ten o'clock. The rest of the morning was spent either in helping the dressers—and one must remember how many daily dressings had to be done then—or in going round with the Registrar.

Regularly at one-thirty on four afternoons a week Mr. J. arrived at the hospital. He came usually in his victoria but he often walked from his house in Great Cumberland Place. Running up the steps and darting into the staff room, he would sometimes have a hurried lunch of sandwiches and a small glass of Australian burgundy he had brought with him. Before an operation the two ward clerks carried the patient on a hand stretcher from his bed to the theatre and also two buckets, each filled with Lysol, one containing gowns for the dressers and the other one towels for the operation. " The Bathmen " were only responsible for the transport of patients from the Front Surgery or from Out-patients to the wards. Then they had to get the instruments from Coles, who sterilised them in the old theatre, in a tray containing 1 in 40 carbolic lotion, together with silk and salmon gut. The Ward Sister or Head Nurse accompanied the patient, but there was no Theatre Sister or staff of theatre nurses ; one nurse only was on duty in the " mackintosh " room and she never attended an operation. Both dressers and ward clerks wore long mackintosh coats with short sleeves gathered in by elastic which gripped the arm just above the elbow and over this those immediately assisting put on gowns wrung out of Lysol. Mr. J. alone wore a dry sterilised sort of pinafore with short sleeves tied above the elbow. After scrubbing with soap and water the hands and arms were wiped over with turpentine before a thorough rinsing in Lysol. Rubber gloves did not, I think, come into general use until some six years later. The patient's skin was similarly washed over with turpentine and Lysol and the operation area surrounded with towels wrung out of Lysol. No catgut was ever used, as all methods of sterilising it were distrusted. Silk was used exclusively for ligatures and deep sutures, with interrupted salmon gut stitches for the skin. I never saw Mr. J. use a continuous horse-hair suture and Michel's clips were not invented until many years later. At the completion of the operation the wound was dusted with sterilised iodoform or xeroform and over it was placed a piece of green protective—green oilsilk—a real Listerian relic. This was followed by double cyanide gauze and lastly by iodoform or salicylic wool, the purple gauze and primrose yellow wool making an effective colour scheme. The anæsthetic, given almost always by the House Surgeon, consisted of A.C.E. with a Silk's mask (there was no premedication) often followed by ether, for which either an Ormsby or Clover inhaler was used. Sometimes Mr. J. would demand chloroform " Now that the veins are well filled with ether, Mr. Anæsthetist, you can safely give some chloroform." For this latter Junker's apparatus was generally employed. I expect there was more post-operative morbidity, more bronchitis or occasionally a broncho-pneumonia, than there is today, but I never saw a death under an anæsthetic during my time at Guy's.

For a ward round Mr. J. always had a large following, as he was generally considered the best teacher of surgery in the hospital. On such occasions the atmosphere was usually stormy with some striking gleams of sunshine. His teaching always took the form of question and answer and the questions were often unexpected. " What would Sydney Smith say if he saw a woman like that ? " as he pointed to some stout patient. No one, of course, was sufficiently acquainted with the dicta of that ecclesiastic to provide the answer. " It would be a good morning's walk to go round her waist, sir ; you would have to read the Riot Act to disperse her." Or, commenting on the misuse of a fomentation, he would again paraphrase Sydney Smith—" You might as well foment the dome of St. Paul's to please the Dean and Chapter." I remember one question he posed to which even his own answer was not altogether satisfactory. " Why," he asked, " is the transverse colon near the stomach ? " No one knew any embryology to speak of in those days and all were dumb. " One can only suppose," Mr. J. would answer, " that a beneficent Providence had a very good reason for placing the sluggish colon next to the actively contracting stomach."

In Naaman and Dorcas surgical tuberculosis took up very many of the beds, tuberculous glands in the neck, in the treatment of which Mr. J. was fond of quoting Professor Mickulicz, " Treat them as if they were malignant and let your first operation on any case be your last," tuberculous joints, which were either erased or excised, and tiresome sinuses, which were repeatedly curetted. In Naaman there were always four or five cases of impassable urethral stricture : Mr. J. was an adept at performing Cock's operation. Otherwise there were the hernias, an occasional thyroid, cancer of the tongue and breast or a renal calculus. During my time as ward clerk I think I saw one appendicectomy, but I never saw the abdomen opened otherwise, as all acute abdominal conditions were admitted into Clinical and the more chronic ones into the medical wards. Occasionally operations were performed *in* the ward. I remember Mr. J. tying the common carotid for a secondary hæmorrhage in the patient's bed in Naaman and doing a cleft palate in Dorcas. Among the many differences in treatment fifty years ago compared with today, two stand out. First, the time patients were kept in bed after any but the most trivial operations—the appendicectomy was not allowed to sit out of bed for six weeks—and again, the amount of alcohol ordered. In Naaman one not infrequently saw a man enjoying a pint of stout or ale, two ounces of brandy and three of port each day.

Take-in week was then, perhaps it is still, a great occasion for the firm. The two dressers for the week, who had bedrooms just above the dressers' room, provided out of their own pockets the material for tea and supper for the seven days. This consisted of a barrel of beer, a ham, some tinned tongues and sometimes a cold sirloin, as well as tea, bread, butter and jam. To the best of my recollection all this food and drink cost each of the two dressers only about twenty or twenty-five shillings. To these meals in the dressers' room all old members of the firm were welcome. I remember seeing more than one khaki-clad figure at supper there just about to sail for South Africa. The dressers also produced an often finely designed and cleverly drawn advertisement, which was hung up in its frame in the Front Surgery and in which was set out the names of the members of the firm and at the end of the week the number and nature of the cases admitted. My abiding memory of those take-ins is the late hours we kept. I had a room in Zetland House for the week and I think we prided ourselves on staying up until three or four o'clock in the morning. There was certainly a great deal to be done and it seemed that nothing was ever commenced until after nine o'clock. Besides writing up one's reports for the Registrar, one was expected to help the dressers to put up fractures. For a simple fracture of the tibia and/or fibula—" When dressers talk of tibs and fibs and nurses talk of trachies," said Mr. J., " I go home,"—a Croft's plaster splint was the standard treatment. There were no prepared plaster bandages then and the performance began with baking the plaster and rolling the gauze bandages in it. As anyone will remember who was familiar with this splint, it required considerable concentration on its detail and speed in its application and there was a regular competition between firms to excel ; the Lucas dressers were considered by many, even outside their own number, to be the most successful in this matter. For fractures of the neck or shaft of the femur, Hodgen's splint was the routine. Another evening's entertainment the week provided for the ward clerk was in watching or helping dressers in their search for bits of broken needle in the sole of the foot or in the palm of the hand. X-rays were not used for this purpose and they had no other aid in locating the foreign body than the uncertain assistance of the telephone probe. The search was therefore often interminable. These activities would be interrupted about ten-thirty by the arrival of the Assistant Surgeon for the week, who also had a bedroom over the dressers' room and who saw the more serious emergencies. I have just said that X-rays were not used for locating broken needles ; nor were they used for broken bones except, I think, in cases of *suspected* fracture. The department was then in its infancy and was not regularly resorted to by most of the surgeons, although I expect Arbuthnot Lane made use of it before he operated on the failures of previous treatment.

Among many memories of Mr. J. his clinical lectures stand out. These were very popular, the Physiology Theatre being filled to capacity, and over them he took an infinity of trouble. I remember particularly two lectures on tuberculosis of the testis and epididymis and two on Lupus vulgaris. In both cases he gave everyone who attended them a lengthy printed précis of the lectures. Can anyone who heard it ever forget the tragic story he told of the young man, who, with a bunch of keys in his trousers' pocket, permitted his fiancée to sit on his lap, the trauma thus inflicted resulting some few motnhs later in a tuberculous testis ? Howse did the regular course of surgical lectures, for which we all had to be signed up and have our names taken by that solemn, imperturbable, unapproachable Janitor, who had the remarkable gift of putting the correct name to a face after only seeing it once.

Lastly, I have an enduring appreciation of the value of the appointment. After several years at Oxford, where one had done tolerably well, it was very good for one to put aside book-learning for a bit. But, very much more than this, its value lay in being under a discipline, in carrying buckets and patients and in preparing tea and supper in the dressers' room. If I was slightly shocked at first at finding myself something of a Helot, the Dean's words in my first interview with him should have forewarned me—" Pray remember," he said, as he blinked, " that at Guy's we pay only the very slightest regard to any academic distinction."

And one last story about Mr. Jacobson. Some two years before I came to Guy's I had heard him read a paper before the Oxford Medical Society. As he finished, he roundly rebuked the secretary of the Society, who had addressed letters to him at " Guy's Hospital, London." " I would remind your secretary that ' London ' is quite unnecessary : there is only one Guy's Hospital in the world."

Reviews

Operating Room Procedures for Nurses. By Jean D. Jolly. 3rd Edition. Faber. *Price* 7*s*. 6*d*.

In this book as in many others on Operating Room Technique for Nurses, one finds different methods of sterilising and management of an operating theatre.

The inexperienced junior nurse in the theatre finds it very confusing to learn from a book other methods of sterilising and technique compared with what she is being taught in her own training school.

The instruments' illustrations are not sufficient and are too specialised. The nurse would find it more instructive and helpful to see instruments used every day in surgery, e.g., general instruments, intestinal clamps, retractors, chest and plastic instruments. Some of the illustrations of apparatus are out of date, e.g., Jellett's Catgut Steriliser, Carrel's Irrigating Apparatus. It has been proved that it is far safer to buy catgut from the Suture Laboratories where every stage of the procedure is supervised by specialists to ensure sterility and tensile strength.

This book has some very practical and useful knowledge, and I think will be appreciated far more by the trained nurse than the nurse in training. D.S.

The Mode of Action of Anæsthetics. By T. A. B. HARRIS. Livingstone. *Price 42s.*

This book, which confines itself almost entirely to the theoretical aspect of anæsthesia and analgesia, represents an entirely new approach to the pharmacological and physiological principles involved. It is based on the most exhaustive study of all references appertaining to this subject and from this the author has been able to show how theories—previously controversial—can be made to fit into a logical sequence ov events.

The book is divided into four sections, namely, Narcotics, Anæsthetics, Sequence of Anæsthetic Depression and Metabolism During Anæsthesia. In the last section there is an excellent account of the side-actions of anæsthetics hitherto inadequately described—which practical anæsthetists will find of utmost value.

The book is well printed but in some chapters more sub-titles would be helpful to the reader. It is not a book which can be read casually because to do justice to the author much thought must be given to his original ideas. Many people will disagree with some of these, but none will question the intense industry and enthusiasm which has been put into this work. The main value of this book will probably be one of reference and the excellent index is a helpful contribution to this end. D.M.C.

A Handbook of Psychology. By JOHN H. EWING. Sylviro Publications. *Price 25s.*

This book, according to its preface, claims to be an introduction to psychology for medical students. The reviewer cannot imagine that they will be satisfied with such an introduction. The book is almost trite and, except for an adequate final section which briefly covers psychopathology, seems to have little practical application. Moreover, the style makes reading difficult and it tends, on occasion, to obscure meaning. The author has overlooked numerous valuable modern contributions to psychology, emphasising unduly his own particular field, and has thus achieved a peculiarly unbalanced book. E.W.

Minor Surgery. Edited by SIR H. OGILVIE and W. A. R. THOMSON. 2nd Edition. Eyre & Spottiswoode. *Price 14s.*

This admirable little book has been compiled by a number of eminent authors, under the editorship of Sir H. Ogilvie and W. A. R. Thomson. It should be valuable to practitioners as well as to dressers and house officers in in the care of many of the most common cases seen in medicine. P.W.C.

Diseases in Infancy and Childhood. By R. W. B. ELLIS. 1951. E. & S. Livingstone, Edinburgh. pp. 695. *Price 42s.*

The author's name invites one to take down this new book, the excellent paper, printing and pictures lead one to read and the success achieved by Professor Ellis in dealing with the whole of pædiatrics impress greatly. The book is thoroughly up-to-date. The essence of pædiatrics, the *infant's* diseases and how to deal with them at last gets an adequate share. In addition, of course, the diseases seen in children's wards are dealt with and also those for which children go to their family doctors. Doctors as well as medical students will find this a very valuable textbook.

Misprints and mistakes are unusually rare. Fig. 552 might be made clearer ; fig. 162 might be labelled as an infra-red photograph. Authors referred to in the text do not always appear in the reference lists, e.g., Behrendt 1949, and McCance and Young 1941, are referred to on page 464 but have escaped from the list on page 485. These are small criticisms and I would like to add a further one. I am sorry to read, " The etiology is unknown," (page 357), and, " Each (syndrome) has a uniform pathology," (page 360). This battle has probably been lost but could not these phrases have been written, " The cause is unknown " and " Each has a uniform morbid anatomy " ?

R.C.M.

Guy's Theatre Club

"ON MONDAY NEXT"

A comedy in three acts by Philip King. Presented by Guy's Theatre Club, Physiology Theatre, 10th December, 1951.

ACTING is a difficult art for amateurs in the present day. The members of our Theatre Club select comedies by contemporary writers from the theatres of the West End ; and just consider what it is they tackle ! These plays are not literary ; they have no style ; their dialogue is mere mimicry of the slipshod colloquial speech of our time. They are stripped bare of poetry and rhetoric ; there are no warm sentiments to carry away in the heart; the romantic motif is rigidly excluded and there is seldom much of a story. The author may sometimes be a man of ideas, but more often he is not. In the play chosen this time there are actually no ideas : all then must depend upon the actors ! The entertainment resides solely in their portrayal of characters and their ability to make them interesting to us ; and because the tendency of the age to level all things down decrees that these characters must generally be those of quite ordinary or even tiresome people, the task of the actors has become extremely hard. There has been a rise in the standard of acting in the West End in response to the extra demand ; and as for the amateur, he has improved out of all recognition. *On Monday Next* is a particularly awkward play, because the persons in it are themselves members of the theatrical world, and we, who are outside it, are not inclined to take any particular delight in a set of human beings who are represented to us as being rather silly or objectionable. The momentous question then has to be asked, " Did the members of the Theatre Club perform their parts so well that they contrived to infuse interest into this rather unpromising material ? " Well, the answer is that they certainly did. A useful test is provided by the seat on which you are sitting in the Physiology Theatre : if you forget it, the test is positive. I forgot mine.

The less arduous tasks fell to those who had the " character parts." An author of a play, a figure of fun, by Mr. Peter Barrett ; a stage carpenter, a survival from the old comedy, by Mr. Bernard Mallett ; a wretched, dissolute actor by Mr. Kit Wilkinson ; a comic cockney actress, by Miss Jill Fleming—all these parts evoked admirable acting. The most exacting role was that of a producer of plays by Mr. John Hayward, upon whom the success of the evening very largely depended. He gave a forceful and finished performance. Miss Bridget Steel gave a sympathetic account of an unsuccessful, elderly actress of the lady-like type ; and Miss Dilys Lidiard, as a young actress of promise, pleased with a quiet and restrained style. It was the hard lot of Mr. Peter Brook to impersonate a youth whom I can best describe in a single word, ἀκολαστός, or " insufficiently kicked when young," as we were taught to translate it. However, there was one moment, rather a prolonged moment, when he doubtless felt that his part had its compensations. Then, Mr. Mallett doubled his part of the carpenter with the somewhat colourless one of a sort of sub-producer ; and there were some small parts, all competently done. In short, we have learnt to expect a high standard of acting from the Guy's Theatre Club, and once again we were not disappointed. I wonder how they would cope with some really good material which has not become stale, say, *Friar Bacon and Friar Bungay*, or *The Maid's Tragedy !* H.St.H.V.

SIR WILLIAM KELSEY FRY'S PORTRAIT

Donations are still being received from Guy's graduates wishing to be associated with the painting of Sir William Kelsey Fry's portrait. It has been decided that the closing date for the receipt of subscriptions will be the 31st January, 1952. Will any old Guy's men who have not forwarded a subscription and wish to do so please send it to the Kelsey Fry Fund, c o The Medical School Office, not later than this date.

G. B. PRITCHARD.
A. BULLEID.

Memories of Guy's

Mr. A. Ralph Thompson, the last instalment of whose " Memories of Guy's" appeared in our last issue, has asked us to make a correction. He writes as follows :—

> " Etherington-Smith did not stroke the Cambridge crew but rowed 5 or 6. He did not stroke the Olympic crew at Henley but rowed 7."

Mr. Thompson, in his letter to us, makes one or two other interesting comments :—

> " I am also informed that when Etherington-Smith died, his arteries were not those of an old, old man, but were hard owing to increased muscularity.
>
> " Girling-Ball, my friend, died some years ago, but whilst giving my impressions of him, I was writing them sometime before he died. My hopes as to his worldly future were stultified by his death."—ED.

Sport and Hospital Information, etc.

HOCKEY

Inter-Hospitals' Cup—1st Round

Guy's *v.* St. Bartholomew's Hospital

At Chislehurst. Result—Won 5—1

The 1st round of the Cup began well for Guy's and promised much for the future rounds. Linahan won the toss and left the Bart's. side defending into a brilliant winter's day sun. The ground was frozen rock-hard and covered with a layer of white hoar frost, which made it very difficult for the players to remain upright.

Guy's soon mastered the problem of a ball that moved very quickly over the ground, as opposed to the players who were forced to move cautiously, and were rewarded by Blake scoring a brilliant goal to which he soon added a second.

The side now settled down to some very good hockey in which the half-back line was outstanding, completely keeping the Bart's. forwards out of the picture.

Miller and Blake had a fine inter-passing movement which left the opposing defence wide open and culminated with Miller pushing the ball past the Bart's. keeper, making the score 3—0 at half time.

In the 2nd half Guy's relaxed their pressure somewhat but Miller nevertheless scored twice more through some fine forward line movements.

In a last determined effort Bart's. piled on the pressure and forced the Guy's goalkeeper to concede a by corner, which the Bart's centre forward converted with a cracking shot.

Team : C. Bishop ; R. J. Parit, E. A. Murray ; W. Vans-Agnew, D. Linahan (Capt.), C. F. M. Robinson ; J. Cox, J. J. Hall, D. E. Blake, I. J. Millar, D. V. Duckworth.

Inter-Hospitals' Junior Cup—1st Round

Guy's *v.* Middlesex Hospital

At H.O.P. Result—Won 4—0

PASS LIST

SOCIETY OF APOTHECARIES OF LONDON

Final Examination

November, 1951

Pathology, Bacteriology and Forensic Medicine

L. J. Bishop
C. P. B. Brook
V. R. Jones
E. J. Stacey

Medicine

N. P. Burns
G. E. Sharp
E. J. Stacey

Midwifery

N. P. Burns
J. K. H. Culverhouse

PAPERS BY GUY'S MEN

Stafford-Clark, D. The Psychopath in Prison. *Brit. J. Delinquency*, 1951, **11**, (No. 2, Oct.).

Mill, W. A. The Problem of Chronic Nasal Catarrh. *Practitioner*, 1951, **167**, 577.

Kennedy, G. C., and another. The Central Nervous Control of Food and Water Intake. *Proc. R. Soc. (b)*, 1951, **138**, 528.

Luntz, G. R. W. N. Insulin Loss During Injection. A Source of Waste. *Lancet*, 1951, ii, 827.

McDonald, Robert, and another. Gargoylism. *South African med. J.*, 1951, **25**, 725.

Stileman, R. D. W. Spoon Dentures. *Brit. dent. J.*, 1951, **91**, 294.

CHANGES OF ADDRESS

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G. A. K. Missen, M.A., B.M., B.Ch., 24, Queensborough Terrace, Hyde Park, London, W.2, and Coleman's Hatch Vicarage, Tunbridge Wells, Kent.

C. G. Roberts, M.B., B.S., 10, Priory Way, Gosmore Road, Hitchin, Herts.

BIRTH

ROGERS.—On November 28th, 1951, at King's College Hospital, to Joan (née Ayland), wife of Frank Rogers, L.D.S.—a son (Paul Nicholas).

MARRIAGES

MARTIN—CLOVER.—On November 8th, 1951, at Christchurch, Chelsea, J. Antony Martin, M.B., B.S., to Dorothy Clover, S.R.N.

PHILLIPS—WOLLEY.—On November 20th, 1951, at St. Cuthbert's Church, Clungunford, Shropshire, Arthur Roland Phillips, M.B., B.S., to Pauline Lois Wolley, S.R.N.

DEATHS

BUSTEED.—On December 18th, 1951, John Hancock Busteed, M.R.C.S., L.R.C.P., L.R.F.P.S., of 31, Glenleigh Avenue, Bexhill-on-Sea, Sussex, aged 86 years.

CARDEN.—On October 27th, 1951, William Alfred Carden, M.R.C.S., L.R.C.P., of Chemulpo, Lave View Avenue, Denysville, S. Africa, aged 80 years.

EDS. { R.G.
P.A.Z.

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